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SEASONAL CATTLE MOVEMENTS IN SOUTHWEST ALBERTA

BY



ESTHER JEANETTE KIENHOLZ

A THESIS

SUBMITTED TO THE FACULTY OF GRADUATE STUDIES AND RESEARCH

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The undersigned certify that they have read, and recommend to the Faculty of Graduate Studies and Research, for acceptance, a thesis entitled Seasonal Cattle Movements in Southwest Alberta submitted by Esther Jeanette Kienholz in partial fulfilment of the requirements for the degree of Master of Arts in Geography.

ABSTRACT

The movement of beef cattle to seasonal pastures is a traditional practice among cattlemen of southwestern Alberta. References to seasonal pastures during the first decades of the range cattle industry indicate an early recognition of the suitability of the foothill and mountain ranges for summer grazing by domestic livestock.

At present, the typical pattern of movement is away from the ranch or farmstead during the late spring and towards home pastures in the fall. The provision of sufficient winter feed for the herds has almost completely eliminated the use of winter pastures located away from the farm or ranch. A major portion of the summer grazing is supplied by public pastures situated in areas unsuited for cultivation. Almost forty per cent of the area included within the Crowsnest Forest Reserve is utilized for summer grazing by cattle. Additional Crown land administered for grazing is held under long-term lease by individuals or grazing associations, and under annual permits. Private land is most used during the early spring, late fall, and winter but a considerable amount of summer grazing is also acquired from private land either owned or rented by the operator. Use of seasonal pastures enables the operator to make greater use of property more suited to intensive production.

This study gives a descriptive analysis of seasonal cattle movements within the Municipal Districts of Cardston and Pincher Creek and that portion of the province immediately to the west of these districts. The relationships between seasonal pasture use and other aspects of agricultural production are examined. The future role of seasonal pastures is briefly discussed in light of present trends occurring within the beef cattle industry.

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TABLE OF CONTENTS

	PAGE
LIST OF TABLES	viii
LIST OF FIGURES	xi
LIST OF PLATES	xiii
INTRODUCTION	1
CHAPTER	
I. THE RESEARCH PROJECT - OBJECTIVES AND METHODOLOGY	5
A. The Study Area	5
B. Objectives	8
C. Methodology	9
II. LITERATURE REVIEW	13
A. Transhumance	13
B. Public Grazing Lands	15
C. Physical and Biological Environment	17
D. Cultural Environment and Historical Development	18
III. PHYSICAL AND BIOLOGICAL NATURE OF THE STUDY AREA	20
A. Topography	20
B. Climate	30
C. Vegetation	37
D. Soils	45
E. Summary	47
IV. PUBLIC LAND USE IN THE RANGE CATTLE INDUSTRY	48
A. Early Development of Ranching and Agricultural Settlement	48
B. Crowsnest Forest Reserve	55

CHAPTER PAGE

C. Waterton Lakes National Park---------- 61

D. Community Pastures, Grazing Reserves and Co-operatives---------- 63

E. Summary---------- 94

V. CHARACTERISTICS OF PRESENT CATTLE MOVEMENTS AND SEASONAL PASTURE USE---------- 98

A. The Extent and Characteristics of Present Cattle Movements---------- 98

B. Seasonal Pastures and Systems of Land Tenure---------- 108

C. Aspects of Production and the use of Seasonal Pastures---------- 111

D. Case Studies---------- 131

E. Summary---------- 139

CONCLUSIONS---------- 143

BIBLIOGRAPHY---------- 147

APPENDICES

I. QUESTIONNAIRES AND COVER LETTERS---------- 156

II. GRAZING RECORD SINCE 1947 - ALLOTMENTS IN THE SOUTHERN CROWSNEST FOREST RESERVE---------- 170

III. STATUTES AND BY-LAWS---------- 189

IV. SELECTED CENSUS DATA - 1971---------- 206

V. QUESTIONNAIRE DATA---------- 210

LIST OF TABLES

TABLE	DESCRIPTION	PAGE
1	CLIMATIC DATA - SOUTHWESTERN ALBERTA----------	32
2	USE RECORD IN THE CROWSNEST FOREST RESERVE SINCE 1930---	62
3	GRAZING RECORD - TWIN RIVER GRAZING RESERVE----------	67
4	GRAZING RECORD - FIR GROVE STOCK ASSOCIATION----------	72
5	GRAZING RECORD - CASTLE RIVER STOCK ASSOCIATION---------	75
6	GRAZING RECORD - ROSS LAKE COMMUNITY PASTURE----------	77
7	GRAZING RECORD - POLL HAVEN COMMUNITY PASTURE----------	83
8	GRAZING RECORD - BOUNDARY CREEK GRAZING ASSOCIATION-----	88
9	GRAZING RECORD - WALDRON GRAZING CO-OPERATIVE----------	91
10	GRAZING RECORD - BUTCHER CREEK GRAZING CO-OPERATIVE-----	94
11	SIZE OF HERD MOVED IN RELATION TO BASIC HERD SIZE-------	105
12	ACREAGE OWNED AND USE OF SEASONAL PASTURES----------	112
13a	USE OF SIMILAR TENURE SYSTEMS BY RESPONDENTS WITH DIFFERENT BASIC HERD SIZE----------	118
13b	USE OF DIFFERENT TENURE SYSTEMS BY RESPONDENTS WITHIN THE SAME BASIC HERD SIZE CATEGORY----------	119
14a	USE OF A TENURE SYSTEM BY RESPONDENTS WITH DIFFERENT TYPES OF SEASONAL PASTURE LAND----------	121
14b	USE OF DIFFERENT TENURE SYSTEMS AMONG RESPONDENTS USING THE SAME TYPE OF PASTURE----------	122
15a	USE OF SIMILAR PASTURE TYPES AMONG RESPONDENTS MOVING DIFFERENT CATEGORIES OF CATTLE----------	124
15b	USE OF DIFFERENT PASTURE TYPES AMONG RESPONDENTS MOVING THE SAME CATEGORY OF CATTLE----------	125

TABLE	DESCRIPTION	PAGE
16a	USE OF SIMILAR TENURE SYSTEMS BY RESPONDENTS MOVING DIFFERENT CATEGORIES OF CATTLE----------	126
16b	USE OF DIFFERENT TENURE SYSTEMS AMONG RESPONDENTS MOVING THE SAME CATEGORY OF CATTLE----------	127
17a	TYPE OF CATTLE MOVED BY FEEDLOT OPERATORS OF VARYING SCALE----------	130
17b	MOVEMENT OF DIFFERENT TYPES OF CATTLE BY FEEDLOT OPERATORS OF THE SAME SCALE----------	130
18	ACTUAL USE RECORD - ALLISON MAC GILLIVRAY----------	172
19	ACTUAL USE RECORD - BLAIRMORE GOLD----------	173
20	ACTUAL USE RECORD - CASTLE RIVER----------	174
21	ACTUAL USE RECORD - DAISY VICARY----------	175
22	ACTUAL USE RECORD - GAP----------	176
23	ACTUAL USE RECORD - GLACIER CREEK----------	177
24	ACTUAL USE RECORD - GLADSTONE CREEK----------	178
25	ACTUAL USE RECORD - JACKSON CREEK----------	179
26	ACTUAL USE RECORD - LOWER SPRING CREEK----------	180
27	ACTUAL USE RECORD - LYON CREEK----------	181
28	ACTUAL USE RECORD - MILL CREEK----------	182
29	ACTUAL USE RECORD - ROCK-CONELLY----------	183
30	ACTUAL USE RECORD - SENTRY-YORK----------	184
31	ACTUAL USE RECORD - SOUTHEND----------	185
32	ACTUAL USE RECORD - STAR CREEK----------	186
33	ACTUAL USE RECORD - TOD CREEK----------	187
34	ACTUAL USE RECORD - OUTER GAP----------	188

TABLE	DESCRIPTION	PAGE
35a	LAND USE-1971-IMPROVED ACREAGE	207
35b	LAND USE-1971-UNIMPROVED ACREAGE	207
36	BEEF CATTLE NUMBERS ON FARMS-1971	208
37	FIELD CROP ACREAGES-1971	209
38	PERCENTAGE RESPONSE TO QUESTIONNAIRE A	212
39	PERCENTAGE RESPONSE TO QUESTIONNAIRE B	214
40	CROSS-TABULATIONS OF DATA FROM QUESTIONNAIRES A AND B	215
41	LAND USE	218
42	AREA IMPROVED ON FARMS	221
43	SIZE OF FARMS-ACREAGE OPERATED	223
44	TENURE OF FARMS	225

LIST OF FIGURES

FIG.	DESCRIPTION	PAGE
1	LOCATION OF THE STUDY AREA----------	6
2	BASE MAP OF THE STUDY AREA ----------	7
3	TOPOGRAPHY OF THE STUDY AREA----------	21
4	FREQUENCY OF CHINOOKS IN SOUTHERN ALBERTA----------	34
5	MEAN ANNUAL AMOUNT OF SNOW (INCHES)----------	34
6	MEAN ANNUAL LENGTH OF FROST-FREE PERIOD (DAYS)----------	36
7	MEAN ANNUAL NUMBER OF DEGREE-DAYS ABOVE 42°F FROM MAY 1 - SEPTEMBER 30 ----------	36
8	AGRO-CLIMATIC AREAS OF SOUTHERN ALBERTA----------	38
9	RANGE VEGETATION ZONES - SOUTHERN ALBERTA----------	39
10	SOIL ZONES - SOUTHERN ALBERTA----------	39
11	CROWN GRAZING LEASES AND PUBLIC PASTURES----------	64
12	TWIN RIVER GRAZING RESERVE - CATTLE MOVEMENTS----------	68
13	FIR GROVE STOCK ASSOCIATION - CATTLE MOVEMENTS----------	71
14	CASTLE RIVER STOCK ASSOCIATION - CATTLE MOVEMENTS---------	74
15	ROSS LAKE COMMUNITY PASTURE - CATTLE MOVEMENTS----------	78
16	POLL HAVEN COMMUNITY PASTURE - CATTLE MOVEMENTS----------	81
17	BOUNDARY CREEK GRAZING ASSOCIATION - CATTLE MOVEMENTS-----	87
18	BUTCHER CREEK GRAZING CO-OPERATIVE - CATTLE MOVEMENTS-----	93
19	DISTRIBUTION OF THE SAMPLE POPULATION ----------	99
20	NUMBER OF RESPONDENTS IN RELATION TO NUMBER OF CATTLE MOVED AND BASIC HERD SIZE----------	106
21	EXTENT OF CULTIVATION IN THE STUDY AREA----------	113
22	AGRICULTURAL LAND USE IN THE STUDY AREA----------	113

FIG.	DESCRIPTION	PAGE
23	DISTRIBUTION OF ACREAGES OWNED BY HOLDERS OF LONG-TERM LEASES	115
24	DISTRIBUTION OF FARM/RANCH SIZE AMONG THOSE USING ONLY THEIR OWN LAND	117
25	FEEDLOT OPERATION IN RELATION TO NUMBER OF CATTLE MOVED	129
26	FARM A - LOCATION AND LAND USE	132
27	RANCH B - LOCATION AND LAND USE	134
28	RANCH C - LOCATION AND LAND USE	137
29	GRAZING ALLOTMENTS - SOUTHERN CROWSNEST FOREST RESERVE	171

LIST OF PLATES

PLATE	DESCRIPTION	PAGE
1	MAY 18, 1972 - TRANSITION FROM PLAINS TO MOUNTAINS-------	22
2	AUGUST 18, 1972 - TRANSITION FROM PLAINS TO MOUNTAINS----------	23
3	AUGUST 18, 1972 - MILK RIVER RIDGE - ROSS LAKE COMMUNITY PASTURE----------	25
4	AUGUST 24, 1972 - PORCUPINE HILLS - AGRICULTURAL LAND USE PATTERNS----------	26
5	MAY 18, 1972 - RANGE CATTLE IN THEIR WINTER PASTURE------	27
6	JUNE 11, 1972 - ASPEN PARKLAND LANDSCAPE IN THE SOUTHERN FOOTHILLS----------	28
7	MAY 17, 1972 - CASTLE RIVER DURING SPRING RUN-OFF--------	29
8	AUGUST 18, 1972 - TWIN RIVER GRAZING RESERVE - VEGETATION----------	40
9	AUGUST 18, 1972 - POLL HAVEN COMMUNITY PASTURE - VEGETATION----------	41
10	AUGUST 18, 1972 - POLL HAVEN COMMUNITY PASTURE----------	42
11	AUGUST 18, 1972 - POLL HAVEN COMMUNITY PASTURE - MULTIPLE USE----------	85
12	NOVEMBER 1, 1972 - TWIN RIVER GRAZING RESERVE - FALL ROUND-UP----------	100
13	OCTOBER 14, 1972 - GAP ALLOTMENT - FALL ROUND-UP---------	101
14	JUNE 11, 1972 - TRAILING COWS WITH CALVES TO SUMMER PASTURE IN THE FOOTHILLS----------	102

INTRODUCTION

The use of seasonal pastures in southwestern Alberta reflects both the biophysical environment and the historical and economic conditions under which the livestock industry, in general, and the range cattle industry, in particular, have developed. Since the introduction of ranching to southwestern Alberta, during the middle to late 1870's, livestock owners have looked to the elevated meadows and valleys of the foothills and the adjacent lower slopes of the Rocky Mountains for reliable summer pasturing grounds. Today the annual migration of cattle to the eastern slopes is still a significant aspect of seasonal cattle movements within the study area.

As the prairies became settled by the rapid influx of homesteaders, much of the land suited for cultivation was removed from grazing. The favorable climate characterized by greater than average precipitation induced the new settlers to cultivate land which was of marginal physical quality. Most of the less desirable agricultural land characterized by rough topography, poor soils, and a short growing season or inadequate rainfall was reserved, however, for the grazing of domestic livestock. While the range was not stocked to its limit during the first several decades of development of the new industry, by 1918 the negative results of gross mismanagement of the range resource were apparent to government personnel and ranchers alike. As in so many other instances, the Canadian government sought a solution to their problem from the American example. Ephraim Barnes, a range management technician employed by the United States Forest Service, was commissioned to undertake a survey of the range in southwestern Alberta. The Crown lands contained within the Crowsnest Forest Reserve were to be the focus of investigation. His reports and recommenda-

tions formed the basis of range management policy in Alberta until 1950, a period of thirty years.

Since 1950 field inspections have been carried out on all Crown land held under a grazing disposition and where required suitable changes have been made in the recommended stocking rates and management practices. Much of the overgrazing in the forested areas during the years prior to 1950 may be attributed to one basic tenet held by all those concerned with the utilization of the foothill and mountain ranges for the grazing of domestic livestock; namely, by removing the ground cover through grazing the hazard to timber production from forest fires could be significantly reduced. Any adverse effects which might result therefrom were more than offset by the resulting benefits. Policy change subsequent to 1950 regarding range management was largely due to the rejection of this theory and the adoption of a multiple- or integrated-use concept which gave highest priority to watershed protection. Any use which reduced the capability of an area to function as an effective watershed was henceforth not acceptable. Improved fire protection methods and fire fighting equipment have contributed to the relative success of the multiple-use concept. It is partly due to this change in policy that the actual use of the forest reserve for grazing has declined.

While most of the seasonal grazing occurs in the western part of the area, the Milk River Ridge is also naturally suited to extensive grazing as is the area to the southeast of this topographic prominence. Within these two regions, the Provincial government has seen fit to set aside large tracts of land specifically for use by nearby stockmen as summer pasture for their cattle.

Within the Crowsnest Forest Reserve approximately 400,000 acres

or slightly less than one-half of the total area is actually grazed by domestic livestock. During the summer of 1971, 171 permits were issued for 8,233 yearlings and 6,821 mature cattle. No sheep or horses utilized the range. Of eight pastures commonly used by a group of farmers and ranchers, only two lie outside the foothill zone. Together , these eight pastures comprise 73,958 acres and provide summer grazing for 11,532 cattle owned by 270 patrons. Additional Crown land suitable only for grazing is granted under long-term Crown grazing leases to individuals. Within the Municipal Districts of Pincher Creek and Cardston there are currently (1971) about 110 such leases recorded. These leased parcels are also concentrated in the foothill zone and to a lesser extent, in the southeastern portion of the study area. The assigned carrying capacities vary between twenty and fifty acreas per head per year, though most commonly are twenty-four or thirty-two acreas per head per year. Most of the land under lease is largely suitable only for summer grazing.

A significant percentage of farmers and ranchers use privately owned land in addition to, or instead of, public land as seasonal pasture land. Though the amount of information which is available on this particular aspect of seasonal livestock movements from pervious research is very limited, results from field work and original research carried out for the present study permit discussion concerning such use in the following chapters.

In southwestern Alberta, beef production contributes significantly to the economy. Sale of beef cattle accounted for sixty and fifty per cent of the agricultural income in the Municipal District of Pincher Creek and Cardston respectively. In 1971 beef cattle owned on farms in the two districts was 172,335 head. While the percentage of all cattle moved to

seasonal pastures is not large, being estimated at close to one-third of the population, the value of seasonal pastures lies largely in the increased use which may, as a result, be made of better quality farmland.

The demand for grazing privileges on Crown land has always been high, this trend being conditioned by the relatively low costs involved in such use. At present the demand for public grazing is greater than the supply and with the outlook for a continued favorable market for beef cattle such a situation might be expected to persist. Maximum utilization of all resources will be required to meet increased production needs. Faced with a probable declining range resource due to pressure from recreation, wildlife, industry, and encroaching timber along with an expanding beef cattle industry, farmers and ranchers must begin now to plan for a restructuring of their present methods of operation which will make possible more intensive and efficient use of available land, labor and capital.

I. THE RESEARCH PROJECT - OBJECTIVES AND METHODOLOGY

A. The Study Area

The part of southwestern Alberta designated as the study area for the purposes of this research project, is illustrated by Figs. 1 and 2. Fig.1 gives the relative location of the study area within southern Alberta while Fig.2 is a base map of the study area. Bounded on the west by the Alberta - British Columbia boundary and on the east by the eastern boundary of the Municipal District of Cardston, the area possesses a wide variety of landscapes. The transition from mountain to plain is accomplished in numerous places over a distance of only ten to twenty miles. In the main, the northern boundary follows that of the Municipal Districts of Cardston and Pincher Creek. Location of the remaining portion of the northern boundary was assigned to coincide with the northern boundary of the Gap Allotment in the Crowsnest Forest Reserve. While only a few of the ranchers within the study area move their animals to allotments north of the Gap, some of the data concerning use of the Forest Reserve will apply to the reserve as a whole. It is not felt, however, that this is sufficient justification for the inclusion of the entire reserve within the study area. The southern boundary of the study area coincides with the international border.

Though originally the study area was to include the Municipal District of Willow Creek, limitations of time for field work and the additional costs that would have been incurred in t avelling and interviewing in this area made it expedient to reduce the size of the study area. Selection of the final boundaries was based on personal familiarity with the physical and cultural features of the general region and the availa-

LOCATION OF THE STUDY AREA



Fig. 1



BASE MAP OF THE STUDY AREA

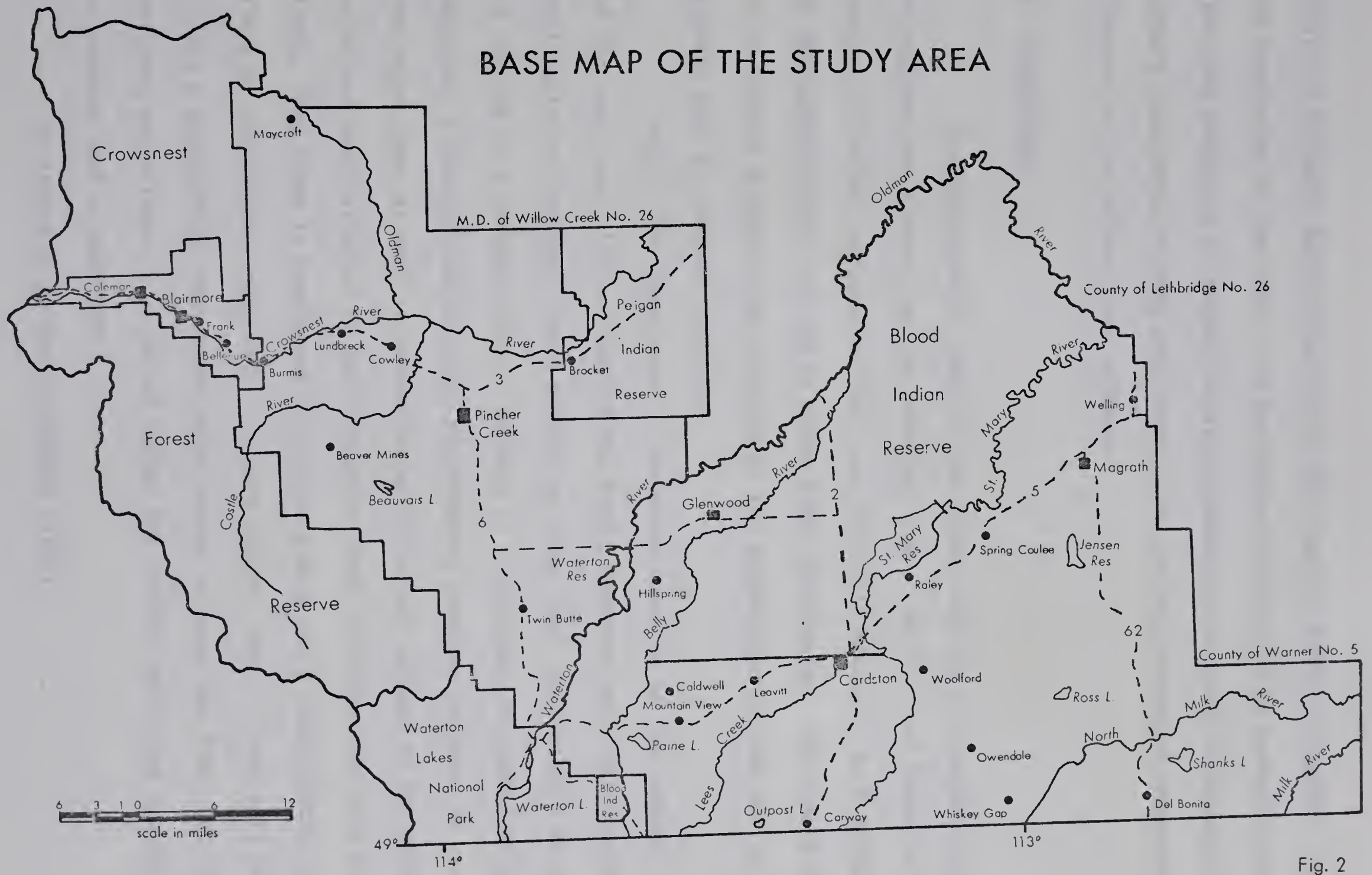


Fig. 2



bility of relevant data pertaining to the area and topic of concern. While the boundaries of the study area may appear at first to be somewhat irregular, the selection of already existing boundaries has made it possible to compare questionnaire data with census data and thus determine representativeness of the primary data gathered.

B. Objectives

This geographical study of the nature and use of seasonal pastures in southwestern Alberta has two principal aims. The first of these is to analyze historical patterns of land use; this will basically be a discussion of the administration and use of Crown lands for grazing. The second aim is to present a descriptive analysis of the present use of both public and private land as seasonal pastures.

Despite the importance of the range resource to the economic base of the study area, little research has been undertaken which deals with the utilization of privately owned pasture or range land, particularly in terms of its use on a seasonal basis. Because it illustrates the impact of the physical, biological and cultural environments upon the patterns of use of the range lands as well as presenting an historical account of the organization and administration of public grazing lands in conjunction with private lands, this study is considered to be both timely and a contribution to the field of agricultural geography. In more general terms, it not only describes a geographical phenomenon which varies in space and time, but also explains and relates in a logical manner the factors which have operated to produce such a phenomenon.

As stated in Morgan and Munton (1971),

> "A scientific agricultural geography is not concerned simply with describing the nature of farming in particular places,...(its) main objective must be to understand the spatial aspects of farm enterprises, that is, crops and livestock, whether considered individually or in groups, and of farm operations,... Since the farm is the decision-making unit it should be a major focus of interest of the agricultural geographer, both in research and in the development of theory." (p.3)

Gregor (1970) points out that there has been a general agreement in the past that the primary object of study in agricultural geography is the study of areal variation of agriculture. Thus it can be seen that the objectives of the current research project, as noted above, comply with the traditionally accepted aims and scope of agricultural geography.

C. Methodology

The primary objective of the research project, to determine the extent and characteristics of the use of seasonal pastures and the movements to and from such pastures within the area outlined, was considered in determining the sample population. Through comparison of lists for both property owners and people possessing a registered cattle brand in 1970, a selection was made which represented with a reasonable degree of accuracy all those who were at that time engaged in the beef cattle industry. A fifty per cent sample (495) of the population thus derived was selected by choosing alternate names.

Design of the postal questionnaire was facilitated by informally interviewing a number of farmers and ranchers within the study area who were known to utilize seasonal pastures on either private or public land. At the same time the District Agriculturists at Cardston and Pincher Creek were contacted and informed of the study as were government personnel connected with the administration of Crown land for the purpose of grazing.

From this preliminary research it was decided that while a mailed questionnaire would be valuable in that it would allow a large percentage of the population to be contacted, because of the diversity which exists among individual operations it would also be necessary to arrange for personal interviews with a number of the population to gain an understanding of the variations in patterns and systems of seasonal livestock movements.

The format of the first questionnaire included both open and closed questions. Appendix I should be referred to for a copy of this questionnaire and enclosed letters of introduction. The questionnaire was basically divided into two parts. One group of questions was designed to provide information on the nature of the movement itself, while the second group was intended to result in an understanding of the characteristics of the seasonal pastures.

Pre-testing of the questionnaire by mail revealed no specific problems in design, though the rate of response was only twenty-eight per cent. The return could possibly have been improved by the use of follow-up reminders. However, such a procedure was not considered necessary at this stage. One factor which became obvious as the research progressed and which likely affects many researchers amongst farmers or ranchers, is the respondents' understandable reluctance to fill out all of the survey forms which they receive. A few of the people who were later interviewed complained of being over-researched (they stated that questionnaires were received almost every month).

Expecting no major problems in format, the questionnaires were mailed out to 465 farmers and ranchers on June 26, 1972. The response rate was considerably better than for the test sample, there being a return

of 214 usable forms or fifty-six per cent. The more favorable return was likely due to a combination of factors including increased publicity of the study through announcement on a farm broadcast by CJOC Radio, Lethbridge. A subsequent reminder was sent to all those who had not returned the survey within two weeks. Personal acquaintance with a considerable number of the people contacted may also have had a favorable influence upon the return rate. There appeared to be a general interest in the research project by the population as judged by the additional comments made on the returned forms.

During August and September interviews were arranged by telephone with fifty of the respondents. These were randomly selected, using a table of random numbers, from that group who indicated they did in fact use seasonal pastures and would be interested in participating further in the study. In light of the many variations which occur among individual operating units, it was thought that an informal and unstructured type of interview situation might be most adaptable and effective in obtaining an insight into each particular operation. Statistically comparable data were not obtained for all cases.

Preliminary analysis of the data obtained from the postal survey revealed that additional information would be beneficial in determining the linkages between land tenure and seasonal pastures. For this reason, a supplementary form was sent to those people who had indicated that they move some or all of their livestock to seasonal pastures. As in the previous case, a letter of introduction and a self-addressed stamped envelope were enclosed. A brief summary report of findings from the first questionnaire was also included. The design of the second questionnaire consisted mainly of a table of land use as shown in Appendix I. Because it was felt

that some of the questions might be considered as too personal, it was specifically stated that the recipient was under no obligation to complete the form. Many of the returns were in fact only partially completed. No reminder was sent to the sample since a sixty-eight per cent return or seventy-four questionnaires had been received.

Analysis of the questionnaire data showed it to be representative when compared with census data for 1971. Percentage response to each question was determined and a series of cross-tabulations relating the more important factors in movement and utilization were calculated. Appendices IV and V contain information related to such analysis.

II. LITERATURE REVIEW

While numerous articles, books, and theses have been written which contribute background information to the study, unfortunately little research has been carried out on the range resource held under private ownership in southwestern Alberta. The use of Crown land, on the other hand, is well documented. Literature which has been of some direct benefit to this study will be discussed under the following four sub-headings: A. transhumance, B. public grazing lands, C. physical and biological environment, and D. cultural environment and historical development.

A. Transhumance

Though the study is not intended to be specifically a description of the transhumance aspects of seasonal cattle movements within the study area, the very nature of the landscape and climate dictates that such a practice should occur given the presence of a ranching industry.

It may be noted that while there is a relative abundance of literature describing the long established tradition of transhumance in Europe, little work has been done concerning this practice with reference to the American or Canadian scene. In regards to the European situation two major works in particular will be cited, these being by E.H. Carrier (1932) Water and Grass, A Study In The Pastoral Economy Of Southern Europe and J. Klein (1920)The Mesta, A Study In Spanish Economic History 1273-1836. Articles dealing with a particular location or aspect of transhumance in Europe, while interesting, need not be mentioned here for they have not added directly to the immediate topic of research. The majority of research in this area was carried out during the 1920's and 1930's. A revival in

interest appears to be occurring at present among British geographers in particular.

Because of the scarcity of any literature dealing with the seasonal movements of livestock in either Canada or the United States, it is felt that mention should be made of even short articles. Of these, perhaps the most important is an article appearing in Economic Geography (1926) by L. White. The author discusses transhumance in the sheep industry of the Salt Lake region. Causes of transhumance, the influence of the physical and biological factors upon the sheep industry, the policies of the United States Forest Service, and the characteristics of transhumance in the past and present are discussed.

With respect to transhumance in Canada, only two rather brief articles were located in either professional geographical periodicals or agricultural journals. These were 1. Weir, T.R. (1954) The winter feeding period in the southern interior plateau of British Columbia, Annals of the Association of American Geographers and, 2. Van Ryswyk, A. (1970) Alpine ranges in south central British Columbia, Canada Agriculture. Weir discusses the economic significance of winter feeding for the ranching industry located within the Interior Plateau of British Columbia. The length of the feeding period is related to environmental factors as well as variations in operating methods. The recent trend has been towards increased supplementary feeding and away from dependence on winter range. Van Ryswyk's article summarizes data gathered by the CDA Research Station at Kamloops on the vegetation and soil conditions of the alpine ranges of south-central British Columbia. Knowledge of such conditions is important for determining proper range management practices. He concludes that with greater use of alpine ranges for the summer grazing of

cattle, similar surveys in other areas must be undertaken.

B. Public Grazing Lands

Use of public land for the grazing of domestic livestock is discussed by numerous authors, the American situation being particularly well documented. Since much of the public grazing land is used for summer grazing only and is located in mountainous or foothill regions, there is necessarily an overlap with the literature on transhumance.

In Alberta, most of the information pertaining to the use of Crown land for grazing is found in the reports and files of the Department of Lands and Forests. While most of the data has remained unpublished, an exception is found in the Annual Report of the Department of Lands and Forests and its predecessor the Department of Lands and Mines, the Dominion Department of the Interior prior to 1930, and the Alberta Department of Agriculture. During its existence, the Eastern Rockies Forest Conservation Board also published an Annual Report which has added considerably to the information gathered in respect to grazing on the eastern slopes of the Rocky Mountains.

The Statutes of Alberta are a significant information source relating to the administration and use of public land. The "Public Lands Act, 1966" and the "Forest Reserves Act, 1964" set forth regulations controlling the use of Crown land for grazing.

T. Joyce (1969) has summarized the use of Crown land for agricultural purposes, information being largely compiled from the Annual Reports of the Alberta Department of Lands and Forests, and the Alberta Department of Agriculture. The grazing reserve development program in Alberta and range management in the forested areas of the province were

the topics of papers presented at the twenty-second annual meeting of the American Society of Range Management held in Calgary in 1969, by respectively S.G. Klumph and G.H. Maduram. W.R. Hanson (1960), has written an article on the grazing resource of the Rocky Mountain Forest Reserve. The Eastern Rockies Forest Conservation Project is discussed by L. Harrington (1954). J.A. Campbell and V.A. Wood (1951), explain the rental system and rate structure used for public grazing in a brief article which appeared in the Journal of Range Management. An article by R. Youngman (1951), Government of Canada community pastures, was published in the same journal. Of historical interest are several reports on range management in the Crowsnest Forest Reserve written by E. Barnes (1918; 1919; 1921), and T.A. Clark (1920) for the Department of the Interior.

Comparable studies on the use of the public domain for private grazing in the Rocky Mountain States are even more numerous. With consideration for space, only a few of the more relevant works will be considered at this point. W. Calef (1960) Private Grazing and Public Lands, Studies of the Local Management of the Taylor Grazing Act, is perhaps one of the most applicable of American studies to the present research topic. Patterns of land tenure, the use and administration of the Taylor Grazing Lands, the importance and characteristics of summer, winter, and spring and fall ranges, and a physical and cultural description of the different areas are discussed on a regional basis.

Numerous books and articles have been written by M. Clawson, former Director of the Bureau of Land Management, United States Department of the Interior. Two may be mentioned here; The Western Range Livestock Industry (1950), and The Federal Lands Since 1956 (1966). Earlier, in compliance with a request from the Senate, the United States Forest Ser-

vice undertook a study of the range problem of the western United States. The findings and recommendations resulting therefrom are embodied in the text of The Western Range (1936). While the list of references is nowhere near exhausted, examination of the literature cited would serve to give an adequate background knowledge for the understanding of the American system of the use of public lands for grazing.

C. Physical and Biological Environment

The natural environment of southwestern Alberta has been studied and reported upon by researchers in many different disciplines. As a result there is a wealth of both primary and secondary data sources.

Climatic tables published monthly by the Canada Department of Environment (formerly the Department of Transport) give data for fourteen stations in or adjacent to the study area. The chinook has been studied by several authors including J.S. Marsh (1965) and R.W. Longley (1967). Included in Marsh's thesis is a chapter on the relationship of the chinook to agriculture. R.W. Longley (1972) has also written a general report on the climate of the prairie provinces. R.J. Fletcher in Jankunis (1972) deals with climatic phenomena of southern Alberta in a similar manner.

Topographic maps and aerial photographs illustrate the surficial geology and topographic features of the study area. Written accounts describing the same are by A.M. Stalker (1953; 1957), D.B. Dowling (1917), and C.B. Beaty in Jankunis (1972).

The floral and edaphic features of southwestern Alberta have been studied and described by such authors as E.H. Moss (1944), F.A. Wyatt (1939), R.D. Bird (1961), W.E. Bowser (1963), R. Duffy (1971), L. Ogilvie (1971), and D. Frederickson (1972). In addition two edited books should

receive mention as valuable references. These are W.G. Hardy (ed.) (1967) Alberta, A Natural History and J.G. Nelson and M.J. Chambers (eds.) (1969) Vegetation, Soils, and Wildlife. The Atlas of Alberta (1969) was also used as a general reference.

Government publications, in particular those of the Alberta Department of Lands and Forests and the Departments of Agriculture are also helpful in that they set forth guidelines for range management on public land.

D. Cultural Environment and Historical Development

To complete the literature survey, information sources and accounts of the cultural environment and the history of development of the range cattle industry will receive attention.

The history of agricultural settlement in southwestern Alberta has been the focus of many studies, both recently and in the early decades of the century. As early as 1882, J. Macoun expounded the merits of the region as a potential livestock producing area. J.R. Craig (1903), the first manager of the Oxley Ranch Company, located in the Porcupine Hills, related the trials and tribulations encountered in the attempt to establish this operation on a sound economic base in the face of absentee English ownership. Other notable early writings were those by C.M. MacInnes (1930) In the Shadow of the Rockies and L.G. Thomas (1935) The Ranching Period in Southern Alberta. More recently the same topic has been dealt with by A.A. Lupton (1967), A. Johnston (1970), and E.E. Miller in Jankunis (1972). F. Huddlestun (1968), a resident,since birth,of the Pincher Creek area, has set down in the form of a journal a series of events related to the settling of that portion of the province. The Grazing Rates Report (1941) is a valuable reference for not only the historical informa-

tion presented but also for the discussion on the economic conditions which prevailed prior to that time and especially during the depression. D.H. Breen (1972) has recently completed a thorough investigation into the early development of the ranching industry in western Canada. His treatment of the subject is significant for it brings to light new concepts which do not correspond with earlier interpretations of the history of ranching. Breen's thesis was unfortunately consulted subsequent to writing of this thesis. The historical interpretation given in Chapter IV therefore is based on earlier works.

Sources emphasizing the economic aspects of livestock production rather than the historical development are more limited in number. There are, however, several which have been of value to the study. Among them are studies by K. Elgaard (1968), H. Love and M. McMillan (1968), K. Miller (1970), R. Miller (1971), and P. Moncrieff (1972). A statistical documentation of the role of livestock in the economy of Alberta may be found in Alberta Agriculture: A History in Graphs, published by the Alberta Department of Agriculture in 1972.

The foregoing survey has been designed to serve as an introduction to a sample of the more relevant literature consulted in the course of research. Many of the quoted references are unpublished material and not readily available to the public. For a complete list of sources, reference should be made to the bibliography.

III. PHYSICAL AND BIOLOGICAL NATURE OF THE STUDY AREA

Situated in the extreme southwestern corner of the province, the study area comprises an area of approximately 120 townships or greater than 4,300 square miles. Over a distance of between eighty and ninety miles the topography varies from mountainous in the west to level or gently undulating prairie in the east. Fig. 3 illustrates these variations in topography by contour lines and shading.

A. Topography

The Rocky Mountains along the western border are the dominant landscape feature of the study area. They rise dramatically over the adjacent foothills and plains to elevations often greater than 8,000 feet above sea level. The local relief is generally 4,000 feet and in a few instances reaches 5,000 feet.

The transition zone between the mountains and the plains is considerably narrower here than in the central part of Alberta. In most places the zone of foothills is less than twenty miles in width and in at least one instance the mountains appear to rise directly from the plain. This is illustrated in Plates 1 and 2. Such an abruptness has resulted in a compact foothill zone. This has resulted in a relatively narrow zone suited to extensive grazing, as compared to areas further north where the foothill belt is much wider. The eastern boundary of the foothills follows a curved line passing through points west of Carway, between Leavitt and Mountain View, west of Twin Butte, east of Beauvais Lake, Lundbreck, and Maycroft.

East of the foothill zone there are two other outstanding topo-

TOPOGRAPHY OF THE STUDY AREA

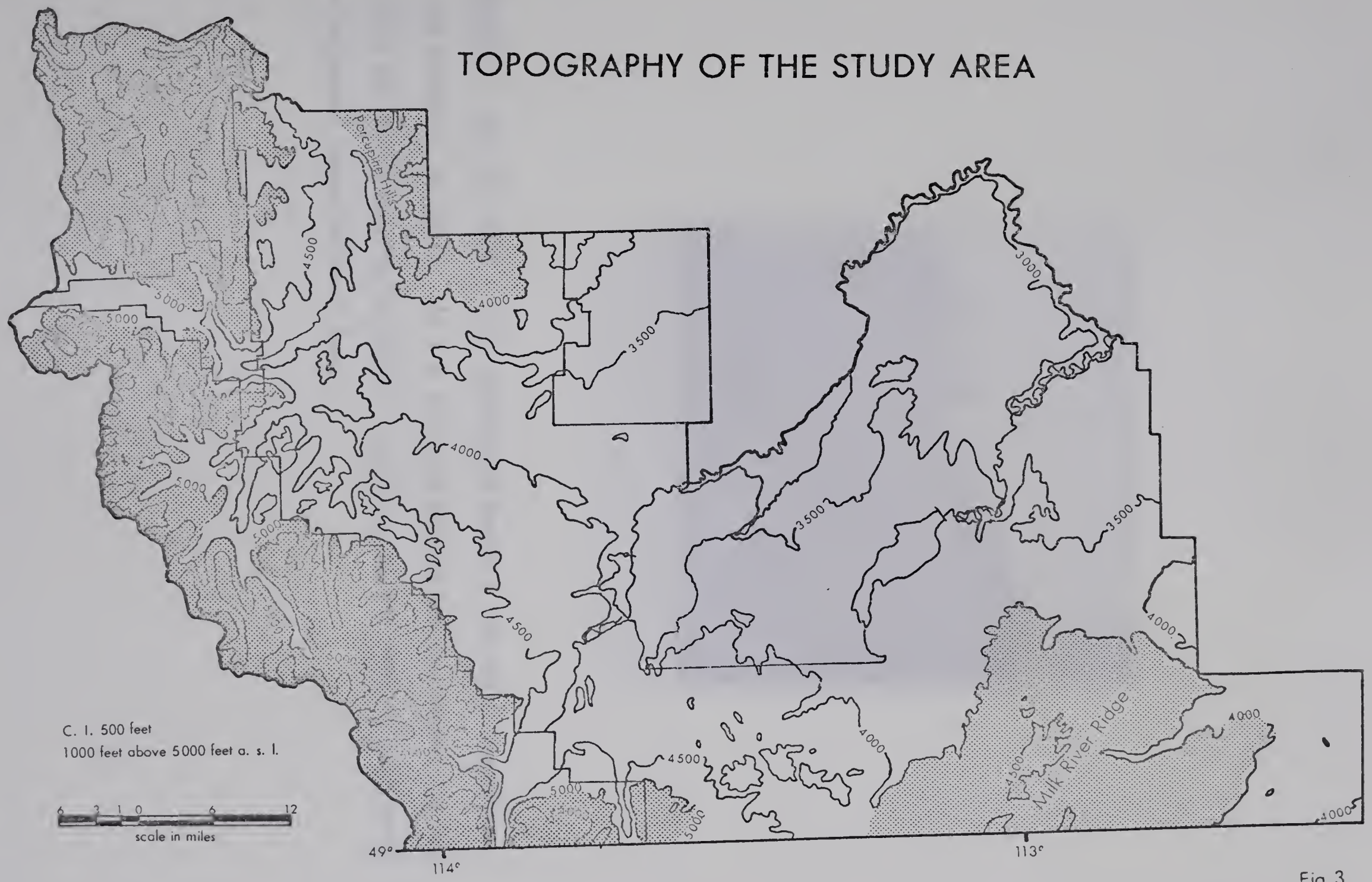


Fig. 3





Plate 1. May 18, 1972 - This photograph depicts the rapid transition from mountain to plain. At the time the photograph was taken, the hay field was being grazing by cattle. Location of the site is just north of Waterton Lakes National Park.



Plate 2. August 18, 1972 - The same topographic feature is illustrated here as in Plate 1. The field which was used for spring grazing is now baled.

graphic features. These are the Porcupine Hills and the Milk River Ridge. Both bedrock eminences, their maximum elevations exceed 4,000 feet above sea level. During the Wisconsin period of glaciation they were high enough to act as barriers to the flow of ice and were not completely glaciated. Their elevated state effectively reduces the evapotranspiration rate thus permitting a variation in vegetation and soil profile from the surrounding lowlands. Owing to the irregular surface configuration, cultivation of cereal and oil seed crops has largely been precluded from the Milk River Ridge, the Porcupine Hills and the foothills. At present the primary land use is as summer grazing grounds for domestic livestock and to a lesser degree, for forage production. Plates 3 through 7 illustrate these uses. Most of the Crown land used for grazing is located within these areas, the only major exception being the Twin River Grazing Reserve.

A gentle regional slope to the east controls the general alignment of the major drainage systems. The Oldman River along with its tributaries, the Castle, Crowsnest, Belly, Waterton, and St. Mary Rivers drain all but the southeastern part of the study area. The Milk River Ridge acts as a drainage divide between northern water flowing to the Hudson Bay, and the Milk River, tributary to the Mississippi which empties into the Gulf of Mexico.

These rivers occupy youthful valleys along most of their lengths, though in a few places they flow in wider pre-glacial channels. The valleys provide increased topographic variety where they flow through the plains area. Outside the foothill belt, the Porcupine Hills, the Milk River Ridge, the major river valleys, and of course the mountains, local relief seldom exceeds one hundred feet.

Throughout the area evidence of both Laurentide and Cordilleran



Plate 3. August 18, 1972 - The undulating to rolling topography in the Milk River Ridge limits use to primarily grazing and forage production. While similar to the scene illustrated by Plate 8, lower temperatures and greater precipitation favor the growth of rough fescue and bluebunch fescue. This particular scene forms part of the Ross Lake Community Pasture.



Plate 4. August 24, 1972 - This picture taken from the Porcupine Hills, overlooks the valley of the Oldman River and an area of intensive strip-farming beyond. Cultivated agriculture is not a significant land use within the hills,however, improved land being devoted primarily to forage production and the less favorable sites reserved for grazing.



Plate 5. May 18, 1972 - Located several miles east of Waterton Lakes National Park, this photograph shows cows and calves in their winter pasture. These animals were moved shortly after the photo was taken. While other breeds of cattle such as Aberdeen Angus, Shorthorn, Charolais, and exotic beef breeds are becoming more widespread, Herefords are still the most popular breed of cattle in southwestern Alberta.



Plate 6. June 11, 1972 - This plate portrays the undulating to rolling aspen parkland typical of the southern foothills. A ranchstead lies in the shadow of Old Chief Mountain.



Plate 7. May 17, 1972 - Cattle ranching is the predominant economic activity in the foothill belt. This scene along the Castle River indicates such use. The Castle River is a continuous source of water for livestock.

glaciation is present. The general effect of continental glaciation was one of levelling of the pre-glacial topography. The depth of drift averages from five to twenty feet, apart from buried valleys which may contain as much as one hundred feet of deposits. The north-south boundary between the Cordilleran and Laurentide glaciations may be seen in the field along a zone marked by differentiation in origin of glacial erratics passing between Fort MacLeod and Brocket.

In the foothills and to the west major surface irregularities are due to tectonic forces rather than surface erosion or deposition. Nevertheless evidence of glaciation is very clear. Morainic deposits of significance lie northwest of Mountain View along the Belly River. The numerous small lakes present in this region occupy depressions or kettles remaining after the ice receded. Areas of lacustrine deposits are not widespread,however, as they are in the areas around Cowley, Raley, and Magrath.

B. Climate

The climate of southwestern Alberta is typically continental featuring cold winters, warm summers, and a spring precipitation maximum. There are many local variations however, resulting from differences in elevation and distance from the mountains. Microclimatic effects are particularly marked in the Porcupine Hills and in the Milk River Ridge. Generally, from east to west there is an increase in precipitation, especially snowfall, accompanied by a decrease in mean annual temperature and an increase in wind velocity and duration.

Though there are fourteen stations within or adjacent to the study area, not all have records for a sufficient number of years to es-

tablish reliable mean values. The most complete records have been kept at Lethbridge and Pincher Creek. Temperature and precipitation data for ten stations are summarized in Table 1.

A special feature of the climate in southwestern Alberta is its high degree of variability. Temperature extremes have ranged from forty degrees below zero (Fahrenheit) to greater than one hundred degrees above zero. Precipitation values for Lethbridge have varied between twenty-eight and eight inches since the turn of the century. Wind velocity for southwestern Alberta is significantly stronger than in other parts of the province. Pincher Creek has at least one day per month, for the period November to February, with gusts registering greater than sixty miles per hour, while gusts up to one hundred and six miles per hour have been recorded. The amount and velocity of wind is a direct reflection of the chinook, a foehn type wind experienced from Colorado to central Alberta along the eastern slopes of the Rocky Mountains.

Within the study area, the effect of the chinook is particularly strong during the winter months. Occurrence of the chinook throughout Alberta has been mapped by Longley (1967). Fig. 4 is a partial reproduction and shows the greater significance of the chinook in southwestern Alberta as compared to further east and north. With the approach of this warm dry wind, temperatures can rise forty degrees during a few hours. If the moderating influence of the chinook remains for several days, it can effectively remove the snow cover from the open ground either by melting or by drifting the snow into sheltered places. On the other hand, if the warm temperatures remain for only a few hours, crusting of the snow cover occurs, making it impossible for cattle to graze. Because of this effect ranchers and stock farmers have claimed that the chinook brings both

TABLE 1. CLIMATIC DATA - SOUTHWESTERN ALBERTA

	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec	Year
BEAVER MINES													
Mean Daily Temp	17.2†	18.3	26.6	37.5	47.4	52.7	59.7	57.2	50.8	41.7	30.7	24.7	38.7
Mean Rainfall	0.09*	0.05	0.25	0.44	1.96	3.58	1.41	1.86	1.56	0.58	0.15	0.17	12.10
Mean Snowfall	17.6**	16.2	16.8	17.1	4.8	1.2	0.0	0.0	5.1	12.4	15.5	15.9	122.6
Days With Snow	6	6	5	2	<1	<1			1	3	5	5	39
CALDWELL													
Mean Daily Temp	18.2	20.3	26.5	38.8	49.2	54.8	62.5	59.2	51.4	42.4	30.7	23.8	38.8
Mean Rainfall	0.50	0.01	0.03	0.60	2.30	4.05	1.56	1.70	1.41	0.68	0.08	0.04	12.96
Mean Snowfall	14.4	16.5	17.7	19.6	6.0	1.6	0.0	T	5.7	12.5	16.1	16.2	126.3
Days With Snow	6	8	7	6	2	<1			1	3	5	5	43
CARDSTON													
Mean Daily Temp	18.7	20.3	27.5	40.2	50.6	56.5	64.1	61.1	52.7	43.8	31.3	24.4	40.9
Mean Rainfall	0.03	0.01	0.17	0.52	1.99	3.55	1.62	1.50	1.48	0.53	0.07	0.03	11.50
Mean Snowfall	7.2	9.0	9.7	8.7	3.9	0.4	0.0	0.0	2.7	6.6	8.7	8.5	65.4
Days With Snow	7	8	8	6	2	<1			2	3	6	5	47
CARWAY													
Mean Daily Temp	19.4	20.7	25.1	37.7	48.2	53.7	61.9	59.6	51.3	42.9	30.5	24.0	39.6
Mean Rainfall	0.4	0.1	0.4	0.38	1.92	3.49	1.55	1.50	1.40	0.43	0.06	0.04	10.86
Mean Snowfal.	10.8	13.3	14.8	14.2	5.0	1.2	0.1	0.1	3.7	9.8	10.9	11.2	95.4
Days With Snow	6	7	7	6	2	<1	<1	<1	2	3	5	5	43
COLEMAN													
Mean Daily Temp					Data Not Available								
Mean Rainfall	0.13	0.09	0.09	0.45	1.76	2.52	1.25	1.64	1.43	0.96	0.51	0.38	11.21
Mean Snowfall	13.9	13.1	11.7	11.1	2.6	0.1	0.0	0.0	2.2	6.8	12.1	13.4	87.0
Days With Snow	6	5	5	4	1	<1			1	3	4	5	34

COWLEY A													
Mean Daily Temp	17.3	19.0	26.6	38.3	48.5	54.1	61.5	58.9	51.0	41.9	29.6	23.2	39.2
Mean Rainfall	0.04	0.02	0.05	0.38	1.83	3.20	1.55	1.86	1.43	0.46	0.10	0.06	10.98
Mean Snowfall	12.5	14.8	10.5	10.5	4.9	0.8	0.0	0.0	2.6	7.7	11.0	11.1	86.4
Days With Snow	9	9	9	7	3	<1			2	4	7	8	58
LETHBRIDGE A													
Mean Daily Temp	17.3	19.3	27.6	41.8	52.2	58.5	66.0	63.3	54.8	45.3	31.3	23.8	41.8
Mean Rainfall	0.01	0.01	0.08	0.68	1.84	3.15	1.69	1.63	1.06	0.43	0.05	0.03	10.66
Mean Snowfall	8.7	10.4	9.8	6.8	2.5	0.5	T	0.1	3.0	6.4	10.0	7.5	65.7
Days With Snow	9	9	9	6	2	<1	<1	<1	2	4	7	8	56
LUNDBRECK													
Mean Daily Temp	15.9	17.4	23.6	36.3	46.3	52.0	59.6	57.1	49.6	40.6	28.1	21.2	37.3
Mean Rainfall	T	T	0.0	3.0	1.73	3.54	1.90	1.86	1.24	0.36	0.04	0.01	8.05
Mean Snowfall	8.1	11.5	14.4	11.6	3.9	0.4	0.0	0.2	4.0	8.1	9.9	10.8	82.9
Days With Snow	5	7	8	6	2	<1		<1	2	3	5	5	43
MAGRATH													
Mean Daily Temp		No Data		41.9	52.5	58.8	65.5	63.3	54.8		No Data		
Mean Rainfall		No Data		1.24	1.58	3.01	2.22	1.96	1.23		No Data		
Mean Snowfall		No Data		8.4	3.4	0.0	0.0	0.0	1.6		No Data		
Days With Snow		No Data		4	2		No Data		1		No Data		
PINCHER CREEK													
Mean Daily Temp	17.7	19.6	27.0	39.3	49.1	55.0	62.4	59.7	51.9	43.1	36.1	23.5	39.9
Mean Rainfall	0.01	0.01	0.05	0.55	2.27	3.77	1.50	1.79	1.55	0.54	0.08	0.04	12.16
Mean Snowfall	11.1	11.8	13.6	12.0	2.8	T	0.0	0.0	3.7	8.0	11.6	10.0	84.6
Days With Snow	6	6	5	1	1				1	3	5	5	38

Source: Canada Department of Transport, Meteorological Branch (1968) Climatic Normals, Toronto: Queen's Printer.

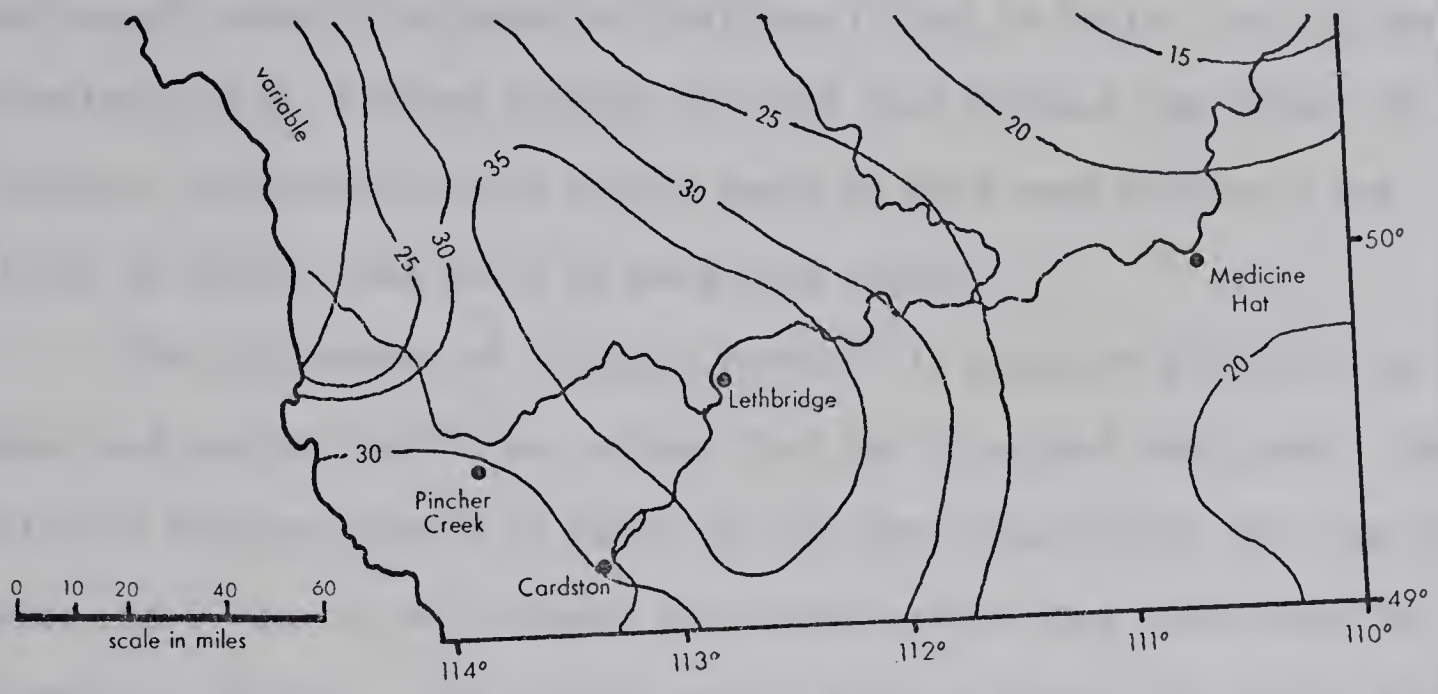
† = Mean Daily Temp in °F.

* = Mean Rainfall in Inches.

** = Mean Snowfall in Inches.

FREQUENCY OF CHINOOKS IN SOUTHERN ALBERTA

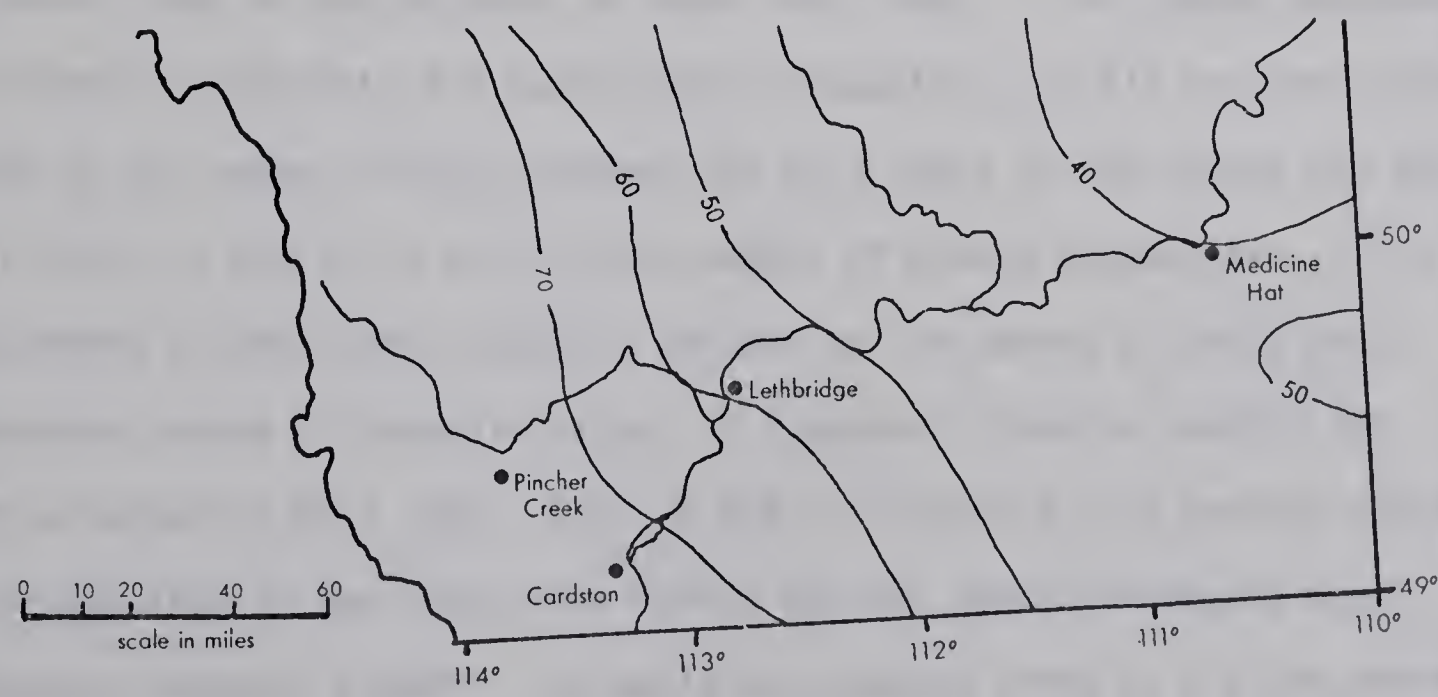
Average Number of Winter Days of or Above 40°



Source: Longley (1967), 21

Fig. 4

MEAN ANNUAL AMOUNT OF SNOW (INCHES)



Source: Longley (1972), 50

Fig. 5

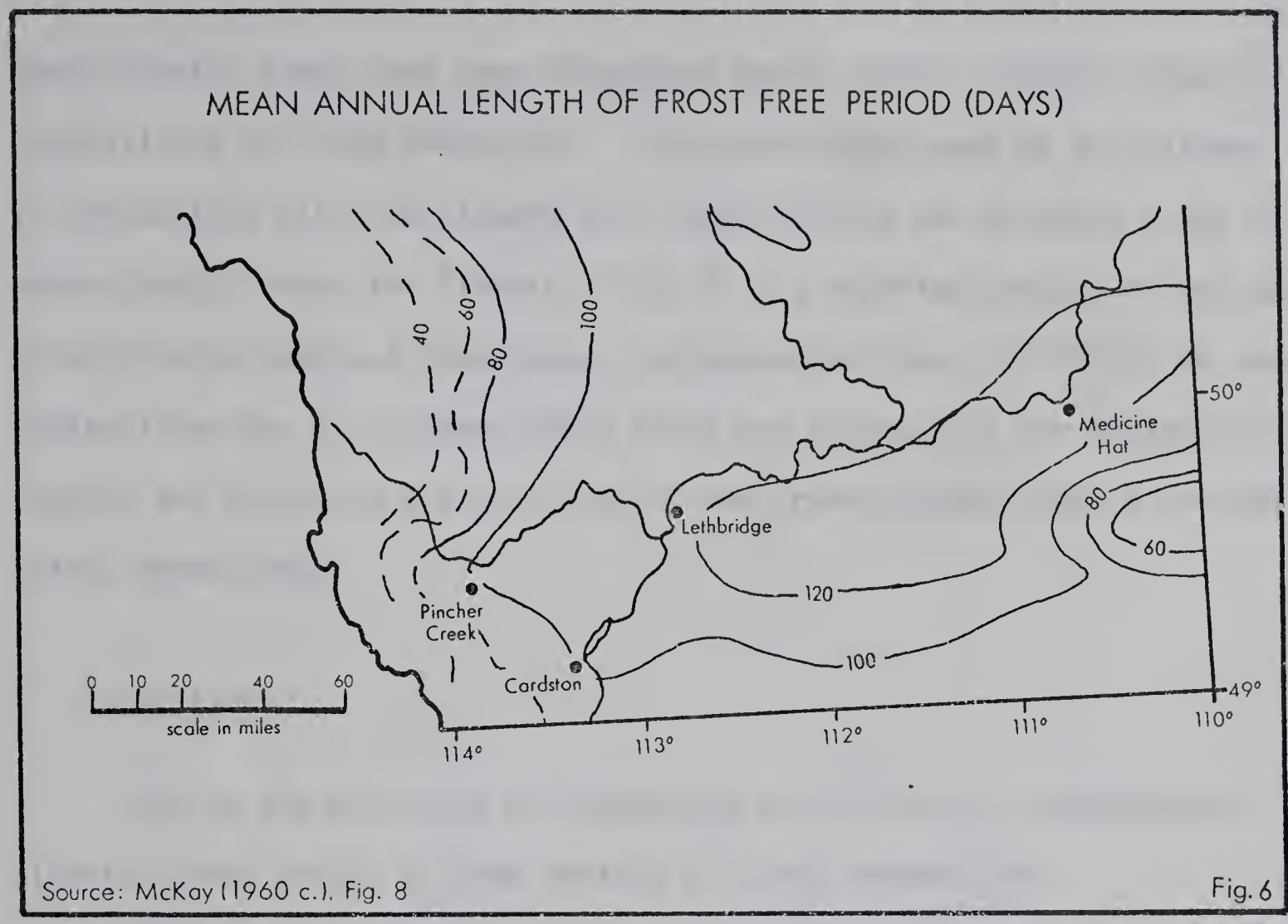




salvation and destruction. In the foothills where snowfall is heaviest, winter grazing is dependent upon the regular occurrence of chinooks. Comparison of snowfall between the stations listed in Table 1 or similarly illustrated by Fig. 5 makes evident the fact that without the effect of the chinook, the production of cattle would be much more difficult and provision of winter feed would be much more costly.

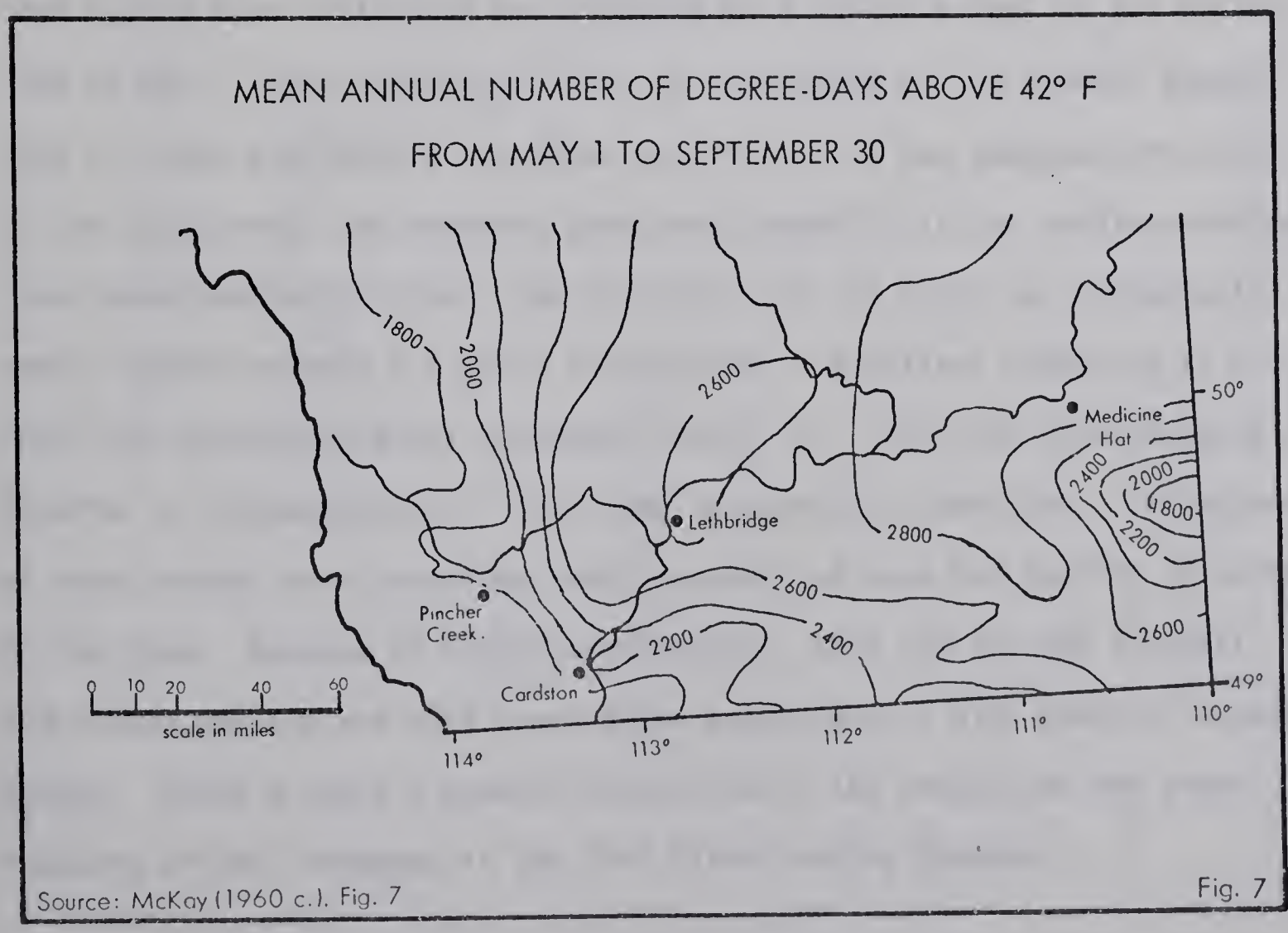
The high degree of climatic variability makes it difficult to estimate and provide sufficient winter feed for livestock each year. The practice of forcing animals to graze in the open, year round, has long been outmoded and virtually all farmers and ranchers make some provisions for supplementary feeding. The feeding period and the amount fed varies with the severity of the weather. Over the last decade, public recognition of the importance of an adequate feed supply has been displayed through provision of financial and technical assistance by the Provincial government to livestock owners on several occasions.

Just as the topography influences the potential of a region for different types of agriculture, so does the climate. Two common measures of climatic suitability for agricultural production are (1) the frost-free period or the number of days between the last frost in the spring and the first frost in the fall, and (2) the number of growth degree-days. This measurement of heat units, usually defined as the excess of daily mean temperature above a threshold value, is frequently used to predict the state of maturity of a crop. Figs. 6 and 7 illustrate in a general fashion the variability of the frost-free period and the number of degree days throughout southern Alberta. As would be expected there is a close correlation between these values as well as with the topography. By taking into account the effect upon plant growth of temperature and precipitation,



Source: McKay (1960 c.). Fig. 8

Fig. 6



Source: McKay (1960 c.). Fig. 7

Fig. 7





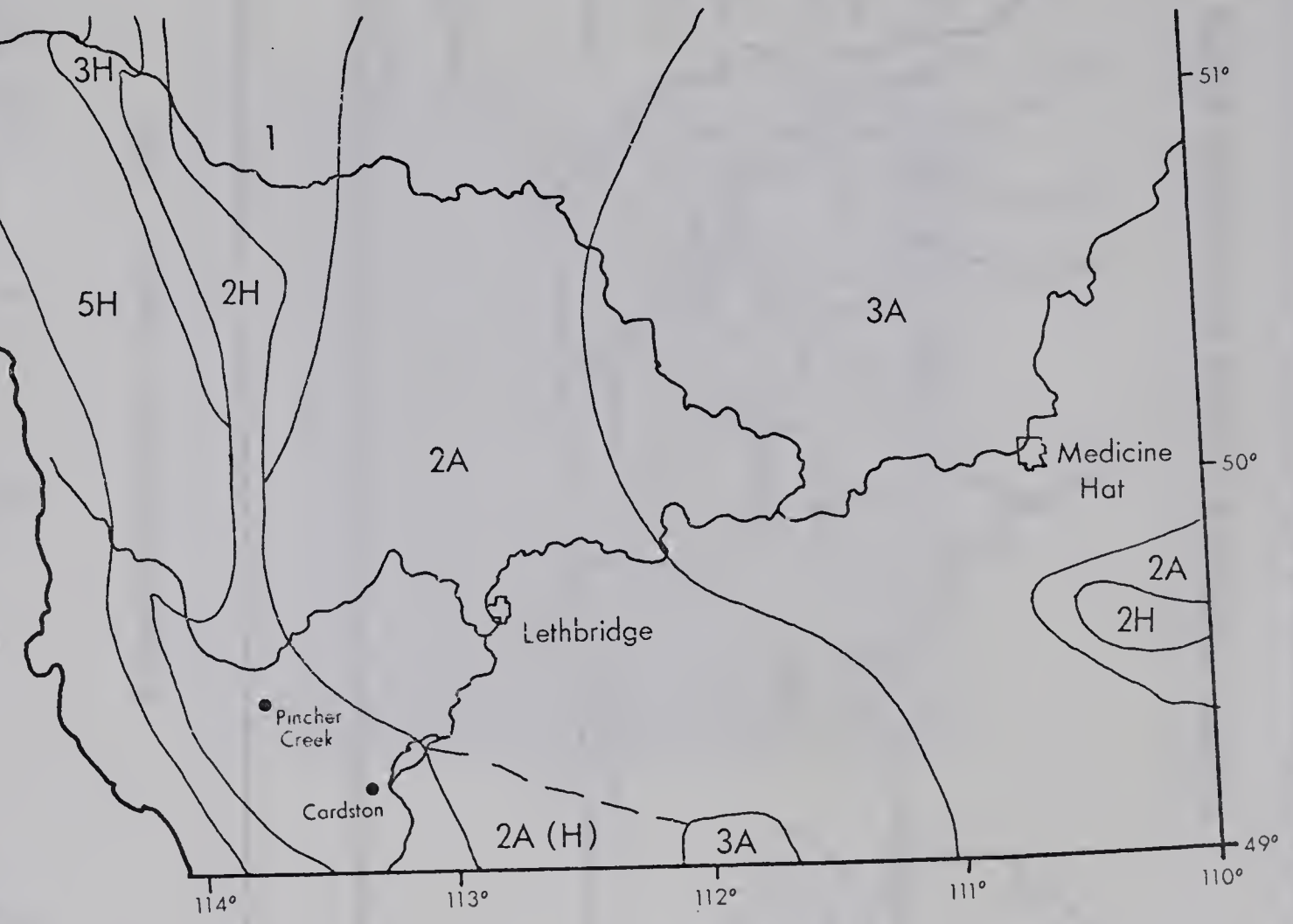
agro-climatic areas have been determined which exhibit similar climatic capabilities for crop production. The Canada Department of Agriculture in conjunction with the Alberta Soil Survey (1967) has produced a map of agro-climatic areas for Alberta. Fig. 8 is a modified version of this map. Of particular note are those areas designated as Class 5H, 2A(H), 3A, and unclassified for it is these areas which are suited only for forage production and extensive grazing. Most of the Crown grazing land is located within these areas.

C. Vegetation

Due to the diversity of topography and climate in southwestern Alberta, there exists a large variety of plant communities.

East of the mountains little native vegetation remains, most of the land having been cultivated or disturbed to a lesser extent by the activities of man. Range vegetation zones as determined by the Alberta Department of Lands and Forests are shown on Fig. 9. In the southeastern part of the study area, the dominant grassland community is the needle-and-thread/blue grama/wheatgrass type. The stocking rate, in acres per animal unit month, varies between 2.7 acres for pasture in excellent condition to 6.3 acres for overgrazed areas (Johnston, 1967; 11). The Twin River Grazing Reserve is representative of this type in excellent condition. The majority of such grasses are classed as short grasses and have the quality of curing on the stem. Because of this characteristic, they can be used for fall and winter grazing and will provide the animal with a high level of carbohydrates. Plate 8 gives a general indication of the vegetation and other features of the landscape in the Twin River Grazing Reserve.

AGRO-CLIMATIC AREAS OF SOUTHERN ALBERTA



LEGEND

1	precipitation usually adequate and frost-free period adequate to permit the growing of all dryland crops typical of the western Canadian prairie
2A	precipitation limits crop growth in about 50 per cent of the years; frost-free period adequate for wheat; in the 2A (H) area a frost hazard exists
3A	precipitation severely limits crop growth; frost-free period adequate for sweet corn, irrigation enables production of raw and specialty crops
2H	precipitation usually adequate; frost free period inadequate for wheat in about 30 per cent of the years
3H	frost limits wheat production; precipitation adequate
5H	short growing season makes cereal crop production impractical ; forage crop production recommended
Unc.	mountain complex, little to no agricultural potential

0 10 20 40 60 80

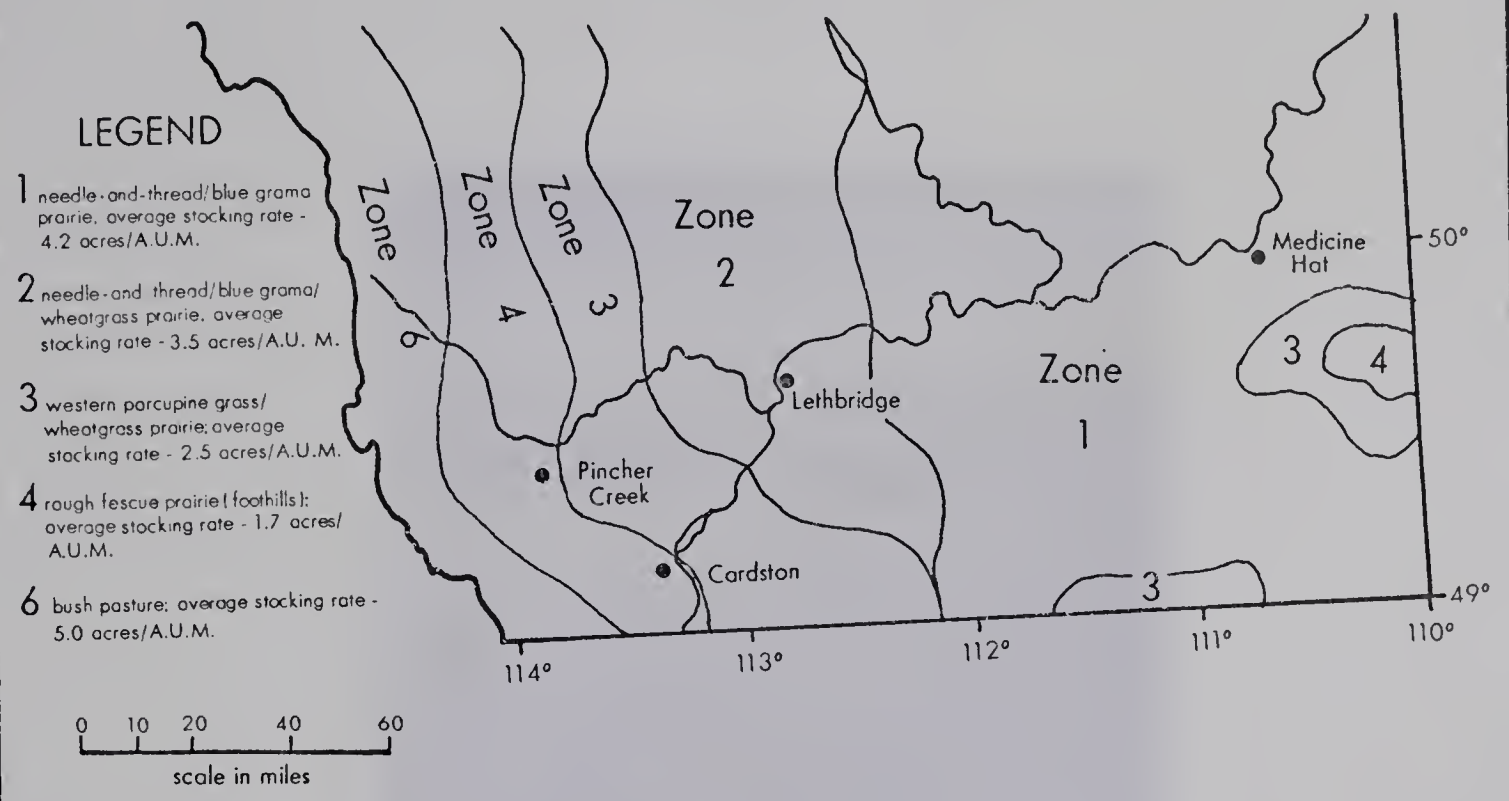
scale in miles

Source: Canada Department of Agriculture and Alberta Soil Survey (1967)

Fig. 8



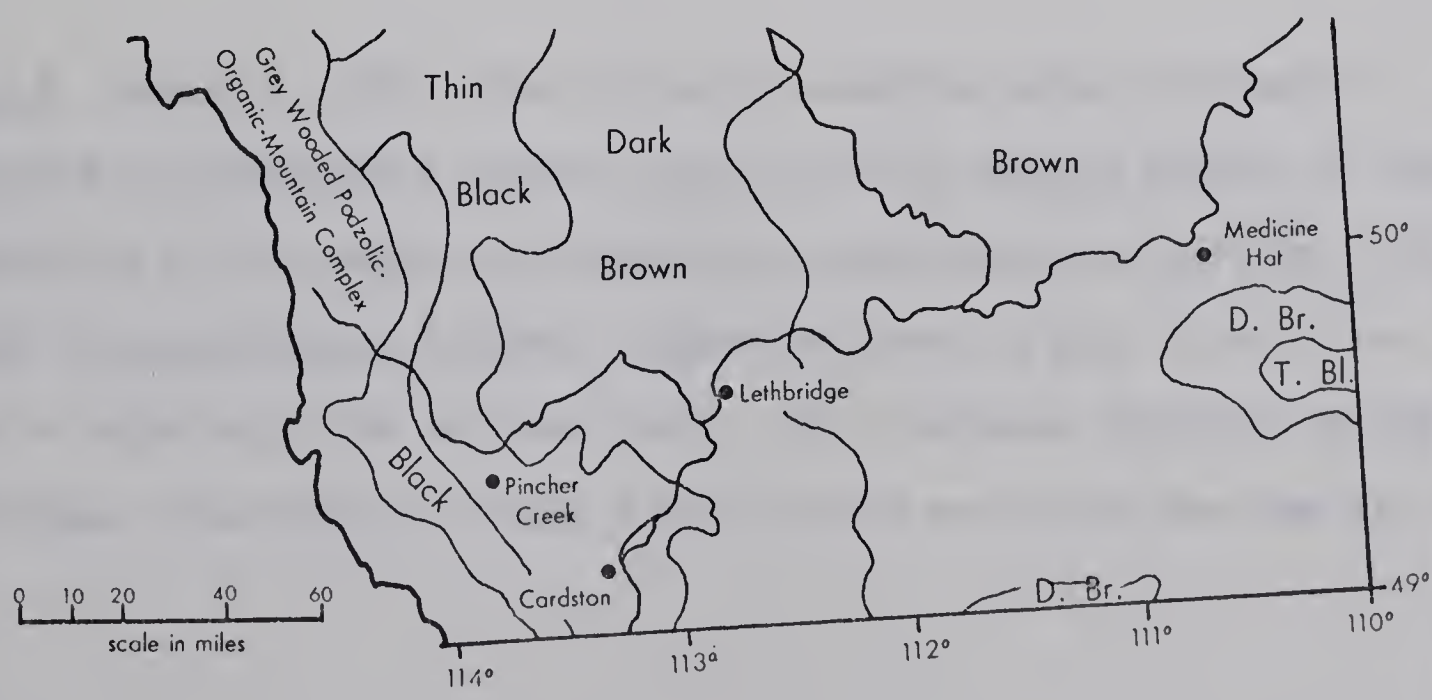
RANGE VEGETATION ZONES - SOUTHERN ALBERTA



Source: Wroe, et. al. (1970), 21

Fig. 9

SOIL ZONES - SOUTHERN ALBERTA



Source: Alberta Soil Surveys (1962)

Fig. 10





Plate 8. August 8, 1972 - One of the few remaining areas of "natural" grassland in southwestern Alberta, the Twin River Grazing Reserve is representative of the needle-and-thread/blue grama/wheatgrass prairie. Tree growth is conspicuously lacking. Though the grass is dry, it still retains a relatively high nutrient level. This landscape contrasts markedly with those illustrated by Plates 9 and 10 which were taken the same day.



Plate 9. August 18, 1972 - This photograph is representative of the vegetation complex found along the western margin of the aspen parkland. The area shown here is used as a summer pasture for cattle.



Plate 10. August 18, 1972 - The greeness of the vegetation maintained even in late summer is characteristic of the foothill and mountain pastures. Aspen poplar is the predominant tree species. This type of landscape is well suited to summer grazing.

Moister sites in the dark brown and thin black soil zones are characterized by the western porcupine/wheatgrass complex. Average precipitation ranges from fourteen to eighteen inches per year, enough for the successful cultivation of cereal and oil seed crops. Only the poorer lands are reserved for grazing. This grassland type is transitional between the mixed prairie and fescue grassland. The carrying capacity is therefore difficult to assess, local conditions being significant factors. Under excellent conditions the stocking rate may reach 2.0 acres per animal unit month or fall to 4.4 acres per animal unit month on pasture in poor condition (Johnston, 1967; 17). Ross Lake Community Pasture is within this zone and has a stocking rate of 2.0 acres per animal unit month. Plate 3 might be referred to again at this point as illustrative of the vegetation type in the Milk River Ridge. Taken the same day as Plate 8, it effectively shows the difference in vegetation.

Fescue grassland dominates the foothills in the black soil zone. It is often found in conjunction with aspen parkland. Plates 5, 6, 7, 9, and 10 illustrate the aspen parkland country of the southern Alberta foothills. Lower temperatures and higher rates of precipitation favor the growth of mid- and tall grasses. Fescue grassland in excellent condition has the highest stocking rate of the grassland types present in the study area, that is, 1.5 acres per animal unit month (Johnston, 1967; 20).

The area of parkland has increased dramatically since the time prior to settlement. Such a phenomenon may be attributed to the closer control of fires which formerly were allowed to burn unchecked. The value of a parkland landscape is well recognized by stockmen. Groves of aspen poplar and willow provide shade during the hot summer, a degree of protection from insect pests, and shelter from the wind. If the tree growth

becomes too heavy,however, the advantages are offset by a loss in carrying capacity. While clearing may be feasible in some instances, financial assistance being granted by both the Provincial and Federal governments, such a practice is not always expedient in the light of good watershed management. In the more rugged areas particularly, there has been a considerable loss of acreage to grazing because of timber encroachment.

On the western margins of the parkland belt the vegetation grades into sub-boreal forest. The climax vegetation here is composed of willow, poplar, pine, and white spruce. In recently burned over areas, lodgepole pine is often co-dominant with aspen. The understory vegetation, lush in summer, stimulates lactation and is often a favored pasture for cows with young calves. With the first killing frost, however, the forage palatability as well as the nutrient level is seriously reduced and hence the mountain pastures are only suited to grazing for a few months of the year. It is a principle of range management that the grass at lower elevations not be heavily grazed in the early spring so that a good growth recovery might be made in time for fall grazing.

Much of the area used for grazing in the Crowsnest Forest Reserve and adjacent to it is composed of the aspen parkland and sub-boreal forest vegetation. Grazing is not permitted above the tree line, therefore the vegetation of this zone will not be dealt with in this study. Carrying capacity is low within the forested areas in comparison with the grasslands, but varies greatly with the degree of forest cover, type of soil, and aspect of slope.

D. Soils

Just as the vegetation reflects the regional and local climate and topography, soils vary in texture, color, depth of profile, and humus content in response to the environmental conditions under which they have formed. Within the study area, three major soil zones are present; these are dark brown, thin black, and black as outlined in Fig. 10. Grey wooded and undifferentiated mountain soils occur at higher elevations in the western part of the study area.

Soil texture is largely determined by the type of glacial drift deposited, though there are limited areas of alluvial soils as well as areas where the bedrock is very near or at the surface. The largest percentage of surface material is loam textured with emphasis being placed on the clay loam fraction. Generally, areas formerly covered by glacial lakes possess silt loams or silty clay loams. These soils are most suited to cultivation since there are few stones, they do not drift as readily as do sandy or clay soils, they are relatively fertile, and they have good water retention. There are no sizable areas which possess sandy soils within the study area.

Clay soils are often associated with lake bed deposits. The largest area characterized by such soils stretches from Lundbreck through Pincher Creek to Glenwood. Under dry land conditions these soils are generally good arable soils possessing a high water retaining capacity and nutrient level. The main problem for agriculture is that baking occurs under conditions of excess moisture followed by rapid drying. This problem can be partially alleviated by maintaining a high organic content.

Climate is perhaps the most important active soil forming agent. The major soil color zones have developed as a result of different soil

moisture conditions. On the eastern margin of the study area, high evaporation rates and relatively low mean annual precipitation rates have favored the development of chernozemic dark brown soil. A typical profile may contain an A horizon, five inches in depth followed by twelve inches of B horizon. The C horizon varies in depth but averages nineteen inches. The surface layer is well supplied with mineral plant foods but is low in organic content.

The transition zones between dark brown and thin black and between thin black and black soils occur over a wide area. The black soils relative to the dark brown group have a surface layer blacker in color and richer in organic matter and nitrogen. Though a large part of the black soil zone is presently covered by aspen parkland vegetation, this invasion of the former grasslands has only occurred within the last century. An example of a profile in the chernozemic black soil zone may be described as similar to the brown soils but having an A horizon of eight to ten inches, and a B horizon of ten to twenty inches.

In the grey wooded zone there is a frost hazard to cereal and oil seed crops. Much of the cultivated land is therefore used for hay crops and pasture. These soils are more easily eroded than the black soils, are often low in organic matter and nitrogen, and usually occur in hilly regions. Careful management of these soils is necessary if production is to be sustained.

Special soil problems within the area arise from wind and water erosion of cultivated land, water erosion on overgrazed hill lands, and saline and alkaline soils. Control of erosion on cultivated lands has been effectively reduced by strip-farming and contour farming. Physically marginal land has been reseeded to grass or legumes in some instances.

Scientific range management practices in the Crowsnest Forest Reserve have contributed significantly to reduction of soil loss through erosion. In many cases ranchers have applied these same practices to their own land. Low lying areas and areas with a high water table are often saline or alkaline in nature. Under such conditions certain forage crops such as alfalfa, wheatgrasses, and Reed Canary grass tend to be more productive than cereals which have low salt tolerance levels. Artificial drainage channels have also been used with some success.

E. Summary

The natural environment has historically affected patterns of land use which developed throughout southwestern Alberta. Rapid transition between ecological zones lends a degree of uniqueness and variety to the study area.

Given the relative location of southwestern Alberta in relation to the American West as well as its favorably suited climate and vegetation, it is not surprising that ranching assumed an early role in the economy of southwestern Alberta. Similarly, the seasonal movement of livestock to elevated pastures was initially conditioned by the variation in climate and vegetation though exact patterns of movement were also affected by federal and later, provincial regulations and the prevailing economic conditions. These factors will form the focus for discussion in later chapters.

IV. PUBLIC LAND USE IN THE RANGE CATTLE INDUSTRY

Introduced to Alberta in the 1870's, livestock ranching became not only a major contributing factor to the economic base of the region but created a new land use pattern and style of life as well.

A. Early Development of Ranching and Agricultural Settlement

On July 15, 1870 the transference of Rupert's Land from the Hudson's Bay Company to the Dominion of Canada set the stage for agricultural development throughout southern Alberta. The barriers to settlement presented by the fur trading interests were no longer effective. With the filling of the American West by settlers at approximately the same time, it was only natural that the search for open range would spread northward across the forty-ninth parallel. By this route, arrived the first herds of range cattle which were to utilize the range lands of present day Alberta. Not until the arrival of the North West Mounted Police, however, did the economic and social conditions attain the degree of stability required for the success of ranching operations. The establishment of law and order was not the only contribution of the police force to the opening of the southwestern part of the province. Their presence created a market for the products of the ranching industry and many of the first ranchers were former members of the force. Two other events which occurred during the 1870's were crucial in the settlement of southwestern Alberta and the development of the ranching industry. The signing of Treaty Number Seven in 1877 effectively placed the Indian population on reservations, thereby curtailing their former freedom of movement. In 1879 prairie fires drove the last great Canadian herd of buffalo into Montana where it was almost

completely slaughtered. While the ungulate population was still a source of food for the Indians, this too was being rapidly depleted. Thus, a second market was assured for the beef cattle industry. Though a special herd was established in the Porcupine Hills by the Dominion for use by the Indians, it was inadequate and poorly managed. Much of the demand was necessarily supplied by local ranchers.

During the 1870's, ranches were small operations catering to local demands. Prior to 1880 many of the ranchers had no legal right to the land they used, simply running their stock on the open range on a first come first served basis. The period of the large ranching company began in 1881 with the opening of extensive tracts of land by the Canadian government for grazing leases. Individuals and companies were permitted grants of up to 100,000 acres for a period of twenty-one years at an annual rental of one per cent per acre. If the area under lease was stocked at the rate of one head per every ten acres within three years, (this was later changed to twenty and then thirty acres) provisions were made in the act for the purchase by the lessee of up to five per cent of the area at two dollars per acre. Security of tenure of lease was reduced by the condition that the lease was terminable upon two years notice.

Numerous entrepreneurs were attracted to southern Alberta from the British Isles, in particular, but also from other European countries, eastern Canada, and the United States. Absentee ownership, present in some cases, such as the Oxley Ranch, was not always to blame for financial failure. Though many of the owners and managers of the large ranching companies were capable, successful businessmen, an insufficient knowledge of the existing physical and social conditions in southern Alberta often led to financial reversals.

Construction of the Canadian Pacific Railway, completed in 1885, provided a short term impetus to the ranching industry of southwestern Alberta, for an outside market could now be tapped more readily. But the railway company could not survive on the trade created by the largely self-sufficient ranchers alone and so in co-operation with the Dominion government engaged in an intensive colonization program designed to fill the West with settlers and towns. Part of this program incuded the establishment of branch lines such as that from Lethbridge to Nelson under the Crow's Nest Agreement of 1897.

By approximately 1885 the dominance of the western economy by ranching had faltered. Those ranchers who survived operated on a smaller area and owned a larger percentage of the acreage operated by them. Regulations for leasing grazing lands were amended in 1885 by an Order-in-Council. Lands under lease were made immediately available for homesteading and pre-emption for prospective settlers or purchasers. By the same Order-in-Council the rental for grazing lands was increased to two cents per acre, the value of the land having been proven. In 1886 all grazing leases were subject, so far as the even numbered sections were concerned, to be withdrawn from the operation of the lease when applied for homestead or pre-emption purposes. An increase in costs was incurred again in 1887 when it was established that grazing lands could only be granted after public competition. In the following year recognition was given to the fact that the grazing lands could not support one head per ten acres for an indefinite period and the stocking rate was reduced to one head per twenty acres (Anderson, 1941; 65-71).

The level and relatively moist areas in the dark brown and thin black soil zones were claimed first by the settlers thus pushing the

ranchers into the foothills and the semi-arid southeast. Permanency of lease tenure did not allow any long range planning to be done which is necessary in an enterprise such as ranching. It was found that more and more land had to be bought at unrealistic prices just to safeguard access to water for the stock. In 1906 land sold by auction in the Calgary, High River, Pincher Creek, Macleod, Lethbridge, and Medicine Hat districts brought prices ranging between three and sixteen and one-half dollars per acre. By the end of that year seventy-five per cent of the land available for purchase at Pincher Creek had been bought and occupied (Anderson, 1941; 67). The better ranchers responded to the situation by intensifying production on their land and by storing larger quantities of feed for the winter. The Dominion government gave consideration to easing the feed shortage by granting permission to lessees to cultivate and crop a portion of the lease-hold for forage production. During the winter of 1906-1907 the failure of the chinook to keep the pastures clear of snow spelt disaster to many of the old style ranchers. Losses of a quarter to a half of the herd were experienced as well as reduced and weakened calf crops the following spring. The land required for grazing the next year was consequently much reduced and the homesteaders lost no time in taking advantage of this fact. Many obtained grazing leases of up to four sections adjacent to their farmsteads and expanded their operations. By 1910 it was stipulated that any new lease land for grazing was to be granted only on land that had been inspected and determined to be unfit for agricultural purposes.

The situation of the ranchers had become desperate enough by 1913 to warrant the appointment of a grazing commission to investigate the ranching industry as a whole in Western Canada. Recommendations of this commission led to new regulations in 1914. The aim was to increase stability

and permanency in the industry by disallowing the withdrawal of any lands under lease for homestead for a period of ten years. Owing to an extremely favorable growing season in 1915 much of the marginal land was classified as suitable for cultivation and so the availability of grazing land became even more scarce.

The seasons of 1918 and 1919 were characterized by drought conditions and many animals in their weakened condition did not survive the severe winter of 1919-1920. The pressure exerted upon the range of the foothills and adjacent mountain slopes finally resulted in their deterioration with soil erosion becoming a localized problem. A solution to the problem was sought in the American example. Ephraim Barnes, a range management technician with the United States Forest Service,was commissioned to undertake a survey of the range in the area included in the Crowsnest Forest Reserve. The recommended carrying capacities resulting therefrom were adhered to until the 1950's as were the principles of range management set forth in the reports.

The next change in regulations governing grazing leases came in 1925. At this time the twenty-one year lease was reinstated giving a decided impetus to the livestock industry. But again this was to be of brief duration for in the years following 1930 drought and economic depression had to be faced.

The problems created were dealt with by the new administrators, the province, in a program of public land acquisition and tax concessions. The Dominion government perceived the problem of the dry land areas as a national one and passed the Prairie Farm Rehabilitation Act in 1935. Through this, major assistance could be granted for reestablishing the grass cover on land unsuitable for cultivation, and the provision of water for the animals which were to use these newly created pastures.

Within the study area township one, range nineteen, west of the fourth meridian was established as a government grazing reserve for the purpose of pasturing surplus stock of the resident farmers in the adjoining district. Applications were received, permits issued, and a fee of thirty-five cents per animal per month was charged. In areas such as this which had experienced conditions of drought for several years the old regulation of pasturing one head per thirty acres was discarded. The new stocking rate was set at four head per quarter section or one head per forty acres for 1-19-W4. The success of this experiment with controlled grazing led to requests that an additional township be used as a government grazing reserve. This matter will be discussed further in the section on the Twin River Grazing Reserve.

The program of grazing leases and permits was continued. Grazing permits, available on an annual basis at a maximum rate of four cents per acre inclusive of taxes, were designed primarily to accomodate settlers (farmers). On the other hand, grazing leases could be secured for a period of up to twenty years and were subject to renewal. There was no limit set on the acreage which could be obtained provided that the land was more suitable for grazing than for any other use. Annual rentals were the same as for grazing permits.

During the 1942-1943 fiscal year, two regulations were established by Order-in-Council that were to have an important effect upon the use of public land for grazing. These were (1) Provincial Grazing Reserves and (2) control and supervision of Provincial Grazing Reserves and Community Pastures by an incorporated association. Effective January 1, 1945 a new rental and taxation system for grazing based on the productivity of the grass and the prevailing price of cattle was inaugurated. The basis for

such a system was the Grazing Rates Report-Short Grass Area of Alberta (1941) by C.G. Anderson. This study was undertaken in view of the generally adverse situation which plagued the ranching industry following the years of drought and depression during the 1930's. It was felt that the flat rate per acre could not take into account all the factors which determine a rancher's income and hence ability to pay rent and taxes. A more equitable system was required.

Since 1945 the administration of public lands for grazing has been affected by legislation on several accounts. In 1957 an amendment to the Public Lands Act ruled that only Canadian citizens and British subjects could obtain grazing leases though permits would still be available to other residents. During 1958 the demand for grazing land was so strong that measures were taken to restrict the acreage under lease which one person could hold to the amount required to graze 1,000 head of stock on a twelve month basis. In this way more land could be released to grazing associations and benefit a greater number of farmers and ranchers. A practical consequence of this was the addition of six sections to the Twin River Grazing Reserve in 1960. Finally, during the 1968 session of the Legislature the Grazing Lease Taxation Act, in effect since 1945, was repealed effective Jan. 1, 1970. All grazing leases and permits would be subject to taxation by the appropriate municipal district, county, or improvement district.

With this introduction to the history of ranching and the role played by public land in the industry, a more complete discussion will now be presented on the use of the Crowsnest Forest Reserve for grazing and the community pasture and provincial grazing reserve program as they pertain to the study area.

B. Crowsnest Forest Reserve

The Rocky Mountains Forest Reserve consisting of the Crowsnest Forest, Bow River Forest and Clearwater Forest, was established as a National Forest by an Act of Parliament in 1906. Four years elapsed before any attempts were made to control the use of the reserve by domestic livestock. During 1910 however, such regulation was initiated at the requests of concerned stockmen. Prior to that year the public lands within the foothill and mountain areas were regarded as free and open range and since the inception of ranching in southern Alberta, had been used for summer grazing. The relative abundance of forage in the more elevated ranges made the region highly suitable for domestic livestock during the summer months.

In this section the history of grazing in the Crowsnest Forest will be discussed. Most of the information has been taken from the various Annual Reports of the Department of the Interior, the Alberta Department of Lands and Mines (later the Department of Lands and Forests), and the Eastern Rockies Forest Conservation Board. Data on recent actual use was obtained from the Alberta Forest Service, and the Grazing and Forest Land Use Divisions of the Alberta Department of Lands and Forests.

Shortly after the establishment of the Rocky Mountains Forest Reserve problems of range management presented themselves all too clearly, particularly with respect to the southern districts. As ranching was first established adjacent to the Crowsnest Forest, and particularly the Porcupine Hills, it was reasonable that problems should also first arise there. What were to be the criteria for determining rates, number of animals, length of grazing period, control of strays, eligibility for grazing privileges and areas for grazing by different kinds of livestock? As in so

many other instances, the American example was chosen as a model. Rates of twenty-five cents per head for cattle and horses for the summer season and fifty cents per head per year were thought reasonable whereas a fair rate for sheep was considered to be six cents per head per summer and twelve cents for the year. Animals less than six months of age were not charged. It was recommended that the ranges utilized by cattle or horses and those by sheep should be physically separate; the sheep pastures to be located at higher elevations rarely attained by cattle or horses. Extent and duration of grazing were to be left to the discretion of the forest officers. Policy regarding priority of applicants was based on three criteria; proximity, need, and previous use.

By 1911 a more definte set of regulations had been worked out. These appeared in the Annual Report, 1911-12 of the Department of the Interior and may be summarized as follows:

"(1) Bona fide residents in the vicinity of the reserve will be given preference in the granting of permits.

(2) The number of stock to be grazed and the period of grazing is to be determined each year in advance by the Director of Forestry.

(3) A date is fixed each year before which applications for grazing are received. Thirty days notice is advertised.

(4) Marks and brands of stock to be given in application forms.

(5) Dues are twenty-five cents per head per month or one dollar for the season payable in advance, only stock six months old or over being counted.

(6) Permits are granted only for the exclusive use of the owners of stock and are not transferable.

(7) Any stock removed before the expiration of the permit may be replaced by other stock, to an equal number, which are owned by the permittee.

(8) Permittees must remove their stock within seven days after the expiration of the permit.

(9) Permittees must salt their stock regularly and must remove the carcasses of the animals which die.

(10) The Department does not hold itself responsible for damage caused by stock escaping from the enclosure.

(11) If grazing interferes with the production of wood the Minister of the Interior may order grazing to cease.

(12) Permittees are required to aid in extinguishing fires in the tract within which permits are granted."

Because settlement of the Porcupine Hills preceded that in the area adjacent to the Rocky Mountains proper, fencing was practicable in the former area at the time regulations were implemented. It was recommended that while all areas should be governed by the Department in such a manner as to ensure each permittee sufficient forage for his stock, on the Porcupine Hills each permittee should be allowed the privilege of grazing a specific area in close proximity to his private land.

It was several years before acceptance of grazing in the forest reserves became general. By 1913,however, practically all of the land south of township nineteen suitable for grazing had been applied for under the Forest Reserve regulations. The value of grazing lay not only in supplying additional range at low prices to a large number of small nearby resident farmers and ranchers, but also in the fact that it encouraged mixed farming and more intensive use of privately owned lands. From the timber management point of view grazing was desirable since surplus forage was removed thus reducing the fire hazard. Trails formed by livestock could serve as fire lanes.

Since the start of controlled grazing in the forest reserve, encouragement has been given to the formation of co-operative associations. Communication and application of range management policies would be enhanced through such organized groups more than through direct action with

numerous individuals. By 1926 co-operative grazing had largely replaced independent grazing particularly in mixed farming districts where herds were small and were more economically grazed in larger numbers.

Most of the grazing permits were issued for cattle and horses for a period of three to five months. However, in response to representations made by the Southern Alberta Wool Growers Association, consideration was given to the setting aside of two areas in the Crowsnest Forest to be utilized by sheep. The first area proposed lay in the valley of the Livingston River and its tributaries west of the Livingstone Range. This area lies immediately to the north of the Gap Allotment. The second area of range requested consisted of that area lying to the east of Waterton Lakes. This area however, was already being extensively grazed by cattle. Though there are large areas of grazing land which are particularly adapted for sheep range, factors such as losses to predators and market preference for beef have resulted in very limited movements of sheep to the forest reserves.

The early decades of use of the forest reserve for grazing were characterized by a certain degree of instability due to climatic conditions as well as to the changing governmental policies. Nevertheless, the number of stock using the forest reserve increased until 1920. The shortage of feed during the 1918 and 1919 seasons pressured the government into carrying out range surveys conducted by Ephraim Barnes of the United States Forest Service, to ascertain maximum carrying capacity. It was determined that considerably more stock could be accommodated than was feasible under the haphazard system followed until then. As a result of a hard winter and a dry summer many herds were severely reduced in number and the total number of head grazed in 1920 was less than in 1918 and 1919. Losses in-

curred were reflected for several years in reduced animal units. In 1925 the first increase in the number of grazing permits in forest reserves was recorded since 1920. A general short lived optimism, beginning in 1927, characterized the industry. An increase in market prices for cattle and sheep, increased acreage under leasehold, greater permanency of tenure through the provision of twenty-one year leases, and an increase in forage crop production were features of this period. Despite these factors, use of the reserve for grazing was not increased to any great extent. During the period 1910-1930 grazing was only second to timber as a source of revenue from the Rocky Mountain Forest Reserve.

A change in forest administration came about in 1930 with the transference of public lands from the Dominion to the Province. There was little evidence in the first few years that any change in policy concerning grazing was to occur as a result. The first Annual Report of the Alberta Department of Lands and Mines (1930-1931) stated: "Grazing within forest reserves has two major aims: the maximum use of range without overgrazing with a view to reduction of fire hazard during the summer season, and the placing of additional areas for grazing at the disposal of ranchers and farmers." While some grazing was permitted during the winter, the number of head being dependent upon the severity of the weather and the feed supply, summer grazing was always the more important.

The ratification of an agreement by the Alberta legislature on April 1, 1948 creating the Eastern Rockies Forest Conservation Board (ERFCB) was to have a profound effect upon grazing in the Crowsnest Forest Reserve. Its purpose was to protect and develop range lands with the object of maintaining the most desirable conditions for watershed management in the upper portions of the Saskatchewan River and its tributaries.

An area of 8607 square miles was included. Implementation of policies formulated by the Board devolved upon personnel of the Alberta Forest Service. One of the first projects undertaken was an aerial survey to obtain photographs from which forest cover could be determined. Grazing control was high on the list of priorities for research. From a reconnaissance survey of range conditions during 1948 it was determined that improper distribution of stock was leading to localized overgrazing with consequent erosion. To rectify such mismanagement, plans were made for an intensive and systematic examination which would provide the basis for policy change and detailed management plans for individual grazing allotments. These plans were to incorporate statements on forage needs of wildlife and watershed conditions. By 1950 the survey was complete for the areas south of the Highwood River and by 1952 management plans for all grazing allotments south of the Bow River were completed and were to become effective in 1953. In the years immediately following 1953, it was noted in the Annual Reports of the Board that range conditions were generally improving,more as a result of changes in management practices rather than from a reduction in animals grazed. A record of range conditions was maintained through the establishment of transects throughout the Crowsnest Forest Reserve. From these records it was determined that by 1960 a number of the management plans were no longer suitable and required revision. Consequently nine allotments were resurveyed during the year. It was intended that each allotment would be re-examined every five to seven years. Also during 1960, the responsibility for detailed range management planning and supervision of grazing was transferred from the Board staff to the Management Division of the Alberta Forest Service. In 1972 the Rocky Mountain Forest Conservation Board was disbanded after twenty-five years.

A record of the grazing use of the Crowsnest Forest Reserve since 1931 is presented in Table 2. Appendix II gives the history of use by individual allotment since 1947. Only those allotments within the study area were included. Several allotments such as York Sentry, Glacier Creek, and Gladstone Creek have been restricted to uses other than grazing, such as watershed and wildlife habitat. Portions of other allotments have been managed to protect key wildlife ranges. The decrease in the numbers of horses grazed is indicative of a transformation in agricultural methods generally as is the decrease in number of permits issued. The second trend is a result of consolidation of small operating units and a greater degree of the use of cultivated crops and feedlots.

C. Waterton Lakes National Park

Waterton Lakes National Park was created in 1910 with the deletion of fifty-four square miles from the Rocky Mountains Forest Reserve. First mention of grazing within the park, other than by animals of the local residents, appeared in the Annual Report of 1914 of the Department of the Interior. At that time, it was stated that many settlers had taken advantage of the privilege offered through the permit system in 1913. Though the rate was formally established as one dollar per head per year, concessions were made which allowed reduced winter rates during 1913. In 1914 rates were set at seven cents per head per month.

Figures available concerning the grazing use of park territory are sporadic at best. The earliest data available is for 1917 when 3,300 head were grazed in the park under permit. In 1919 permits were granted for 2,916 head but owing to the drought experienced during that season and the consequent close grazing, only 1,912 head of horses and cattle were

TABLE 2. USE RECORD IN THE CROWSNEST FOREST SINCE 1930

Year	Cattle		Sheep	Horses	A.U.M.	Permits
	Yearlings	Mature				
1931	4,317			600	no data	26
1932	16,759*		7,465*	2,073		302*
1933	17,426*		6,705*	1,930*		251*
1934	11,546		2,778	1,060		194
1935	13,949		3,184	884		198
1936	13,038		3,843	780		198
1937	16,345*		3,174*	1,010*		260*
1938	19,925*		4,791*	1,543*		270*
1939	20,208*		6,847*	1,318*		250*
1940	21,376*		3,904*	2,038*		273*
1941	19,911*		4,735*	1,799*		284*
1942	19,992*		4,716*	1,857*		292*
1943	20,678*		3,541*	2,206*		304*
1944	21,651*		5,534*	1,809*		298*
1945	21,084*		4,800*	1,210*		288*
1946	21,644*		4,508*	1,019*		300*
1947	15,483		4,183	592	85,724	287*
1948	15,985		2,335	563	86,132	281*
1949	14,863		2,641	390	79,773	no data
1950	15,297		1,725	376	81,441	
1951	14,309			1,200	173	71,932
1952	9,451	4,163		1,753	25	85,724
1953	9,011	5,163		1,150	35	51,372
1954	8,733	5,211		1,297	35	50,303
1955	7,990	6,429		1,015	20	51,815
1956	7,505	6,690		1,000	15	52,548
1957	8,264	5,676		1,000		52,196
1958	8,278	5,331		1,000		49,037
1959	7,890	6,414		1,000		47,456
1960	8,706	5,690		812	35	48,387 188
1961	8,331	5,765		1,039		47,278 184
1962	7,945	5,579		995	118	47,777 186
1963	7,479	6,552		1,042	62	49,773 187
1964	8,189	7,620		820	112	51,955 188
1965	7,910	6,557		975	41	49,291 189
1966	8,324	4,875		1,000		48,432 187
1967	8,715	6,082				46,619 181
1968	8,327	6,680		956		44,542 180
1969	8,623	6,811		922		47,638 175
1970	12,391					46,695 170
1971	8,233	6,821				45,086 171

* Figures for Crowsnest - Bow Forest. In 1936 7,248 cattle, 1,600 sheep, and 596 horses grazed in the Bow River Forest; in 1947 there were 6,724 cattle and 433 horses grazed.

Source: Alberta Department of Lands and Forests (Mines) (1931-72) Annual Report, and unpublished records of forest use.

permitted entry in 1920. In 1921 the number grazed was further reduced to 1,763 head. No further information was found for the years prior to 1947.

As a result of increased concern expressed over competition between domestic livestock and wildlife, a study was commissioned to provide information on the range resource of the park. From the works of A.W.F. Banfield and A.E. Porsild, both of whom found that certain key winter ranges were being heavily utilized during the summer months by domestic livestock (1,500 head of horses and cattle used the park range at that time), justification was provided for the prohibition of grazing within the park subsequent to December 31, 1947 (Banfield, 1950; 31-33).

D. Community Pastures, Grazing Reserves and Co-operatives

Within this section the community pastures and grazing reserves located within the study area will be dealt with separately in respect to their history of development and use. For all but the Waldron Grazing Co-operative, a map has been included to indicate the pattern of cattle movements for the 1972 grazing season. Location of the land leased from the province for grazing is shown by Fig. 11. In several instances, however, additionallands are used in conjunction with the lease area. A table of use is an integral part of each description. Such tables are a composite of information obtained from the files and records maintained by the Alberta Department of Lands and Forests. Data was unfortunately not available for some of the early years and if present was not always comparable to present data.

CROWN GRAZING LEASES AND PUBLIC PASTURES

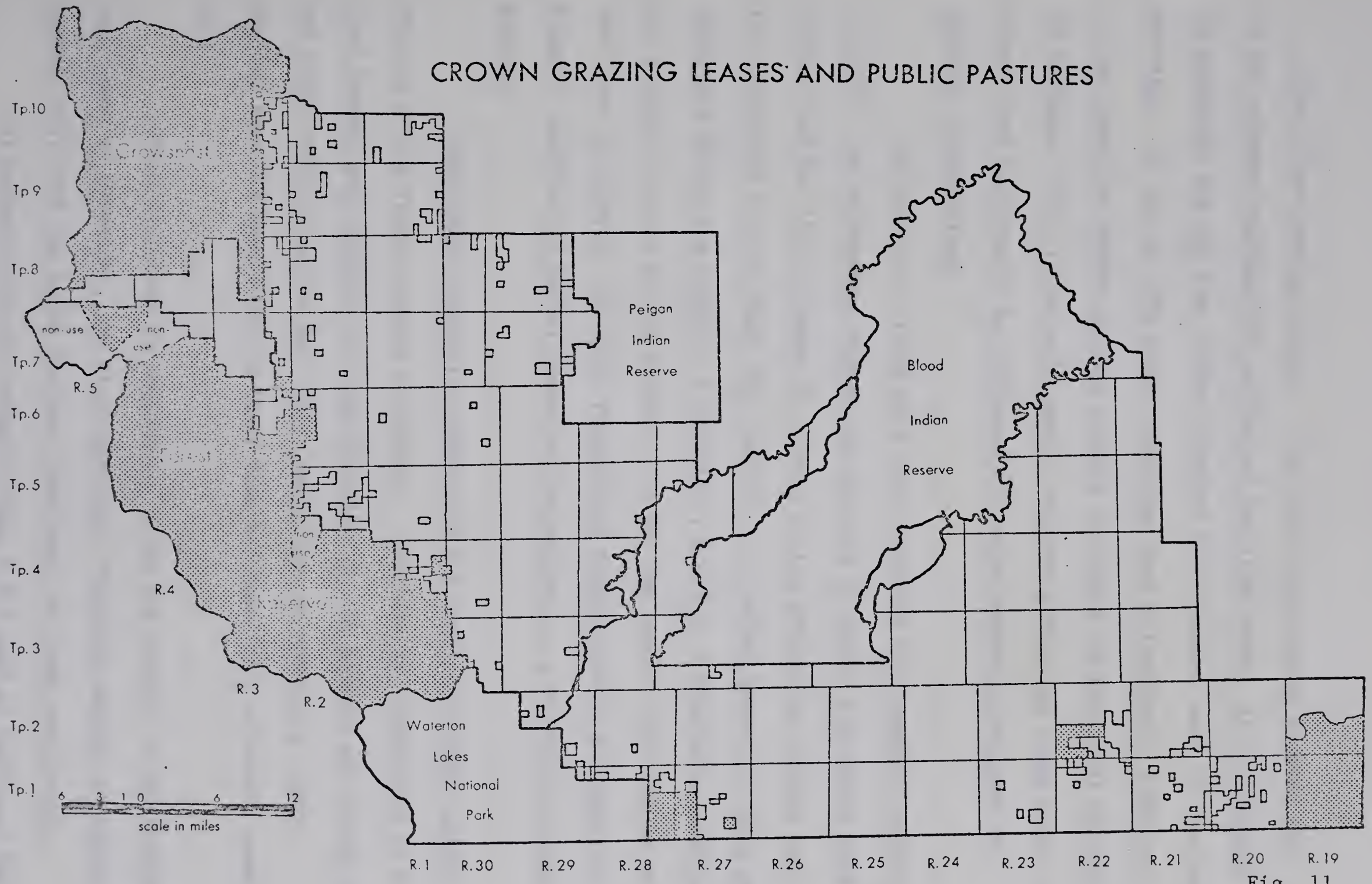


Fig. 11



Twin River Grazing Reserve. The Twin River Grazing Reserve lies in the extreme southeastern portion of the study area. It is situated in townships one and two, ranges eighteen and nineteen, west of the fourth meridian. Of the 30, 870 acres (including road allowances), 3,890 are in the County of Warner and the balance is within the Municipal District of Cardston. This is the only grazing reserve within the study area, the other seven pastures to be discussed all being community pastures or grazing co-operatives.

The lands in 1-19-W4 were first reserved for community grazing in 1935. The reserve was fenced and 500 head of cattle and horses were grazed from May 15 to October 31. Owing to the prevailing drought and the consequent lack of feed, the grazing of a limited number of stock was permitted during the winter. A caretaker, hired as a provincial employee, was placed in charge of the pasture. It was the second such pasture established in Alberta. In 1942, regulations established by an Order-In-Council, enabled the establishment of the pasture as a Provincial Grazing Reserve.

Regulations concerning membership are similar to those governing use of the forest reserve allotments. Priority has been given to full time farmers and ranchers in close proximity to the pasture who relied upon the extra grazing land to make their operations economically viable. Grazing fees are substantially lower than for comparable privately owned land.

While the group of individuals using the pasture is represented on a Board of Directors, the final decisions regarding matters of administration rest with the Lands Divison, Department of Lands and Forests.

At present sixty-six members place 2,343 head of cattle on the

pasture during the summer months. Table 3 summarizes the data on use of the pasture while Fig. 12 indicates the origins and numbers of cattle moved to the pasture.

Fig. 12 is the first of a series of seven such maps illustrating the general patterns of movement of cattle between the farm or ranchstead and the public pasture. The width of each line represents the number of animal units moved, no differentiation being given to the type or age of the animal or the time of movement. While each line indicates the location of the farmstead in relation to the community pasture or grazing reserve, it must be realized that in reality movements are rarely so well-defined. It is often the case that the animals are moved from the winter feeding area or pasture to a spring pasture prior to being moved to the community pasture or grazing reserve for the summer. Nevertheless, these maps do show the area within which members reside.

Similar to other reserves of large acreages, Twin River is divided into five separate fields to accommodate the different classes of stock at different times throughout the season. Fencing is therefore a major cost factor in the operation of this pasture. In addition, large expenditures have been made on the construction of twenty-two dugouts and thirteen dams within the reserve. The other improvements which have been made include a house for the manager, a barn, and several sets of corrals.

One of the few remaining large areas of native grassland in southwestern Alberta, the dominant forage plants are Idaho fescue, needle-and-thread grass, June grass, and wheatgrass. Carrying capacity has recently been increased and now averages forty acres per head per year.

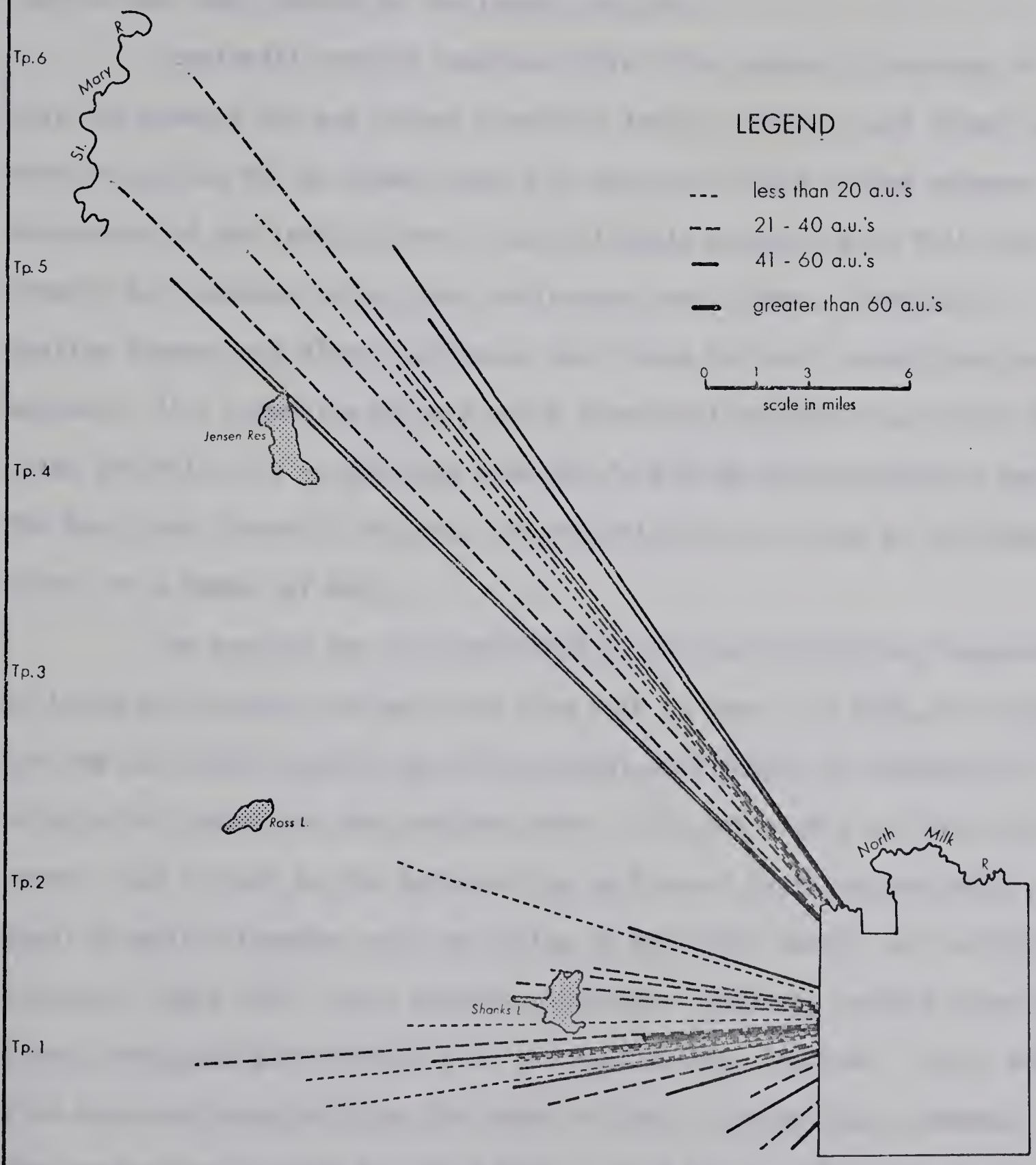
Competing land uses are not as significant as they are in the

TABLE 3. GRAZING RECORD - TWIN RIVER GRAZING RESERVE

Year	Acres	Members	Head	A.U.M.
1943		32	2,256	
1944		37	953	
1945		52	1,214	
1946		61	1,298	
1947		47	1,204	
1948	20,500	55	1,343	
1949		46	1,282	
1950		40	1,318	
1951		44	1,459	no data
1952		25	1,170	7,200
1953		37	1,275	7,538
1954		35	1,336	7,624
1955		37	1,325	7,954
1956		43	1,434	8,465
1957		42	1,368	7,769
1958		46	1,336	8,105
1959	21,388	47	1,310	7,861
1960	24,242	62	1,530	9,200
1961	24,242	65	1,362	8,174
1962	24,242	61	1,370	6,838
1963	25,104	66	1,302	7,314
1964	24,677	60	1,806	no data
1965	31,215	59	1,547	no data
1966		71	?	9,430
1967		70	?	8,525
1968		68	?	9,107
1969		70	2,364	9,142
1970		68	2,260	8,585
1971		66	2,343	9,107
1972	30,870	66		

Source: Alberta Department of Lands and Forests, Grazing File for Twin River Grazing Reserve and the Annual Report 1944-1973.

TWIN RIVER GRAZING RESERVE - CATTLE MOVEMENTS



Note: That part of the reserve and members residing outside the study area not shown. Involved are 3890 acres and 26 members approximately.

Fig. 12



eastern slopes. Wildlife consists of a low to medium density of deer and a medium to high density of prong horn antelope. Local residents have requested that snowmobiling be allowed in the pasture but such requests have been refused by the Lands Division.

Provincial grazing reserves differ from community pastures in that the members are not issued a grazing lease. Rather, each farmer or rancher applies for an annual permit to graze his stock in the reserve. Acceptance of new applications is based largely on need, with full-time farmers and ranchers being given preference over others. Similarly, smaller farmers are given preference over large and well established operators. If a community pasture and a provincial grazing reserve are in close proximity, as is the case with the Twin River Grazing Reserve and the Ross Lake Community Pasture, the present policy is that an individual cannot be a member of both.

The grazing fee is established by the Lands Division, Department of Lands and Forests, and may vary from year to year. In 1970, for instance the fee was established at $3.30 per animal unit month, an increase of eighty-five cents over the previous year. This fee covers not only grass rental, but a grant to the municipality in lieu of taxes (approximately equal to what ratepayers will be paying as municipal taxes), and service charges. Since 1970, lease holders, including community pasture associations, have paid taxes directly to the municipality involved. Their service costs are based only on the needs of their grazing lease, whereas the service charge levied against the users of the Twin River Grazing Reserve is based on an estimate of average costs for producing services to all the dry land grazing reserves in southern Alberta. The rental for grass is similar in both cases.

Fir Grove Stock Association. Regulations established by an Order-in-Council in 1942 provided for the control and supervision of community pastures by an incorporated society. Appendix III contains a copy of the "Societies Act" under which associations are incorporated. This legislation enabled the establishment of both the Fir Grove and Castle River Stock Associations in 1943. The associations pay an annual rent for the land and then set the grazing rates to their members at a level high enough to account for all their operating expenses. Such a procedure was considered early in the development of the community pasture program as an effective and satisfactory method in instances where the area involved was less than a township. Other regulations are laid out in a set of by-laws drawn up by the association members. These are given along with by-laws for the Poll Haven Community Pasture and the Waldron Grazing Co-operative in Appendix III.

The original acreage of Crown land held under lease by the Fir Grove Stock Association was 3,600 acres. In 1948 this acreage was increased to 3,750 and in 1950 a further increase raised the area to 4,473 acres. Increases resulted from the addition of tax recovery lands and school lands. This last increase was only temporary, for the following year the acreage was again 3,750 acres. The acreage leased from the province has been steady since 1962 at 4,343 acres. The legal description of the lease is 6-2-W5 and 7-3-W5.

Present active members number five though in the past the benefits of the pasture have been enjoyed by six members. For summary data on past use refer to Table 4. Additional to the land held under lease from the Crown are currently 1,133 acres of tax recovery and school lands making a total area of 5,475 acres. Fig. 13 shows patterns of cattle

FIR GROVE STOCK ASSOCIATION - CATTLE MOVEMENTS

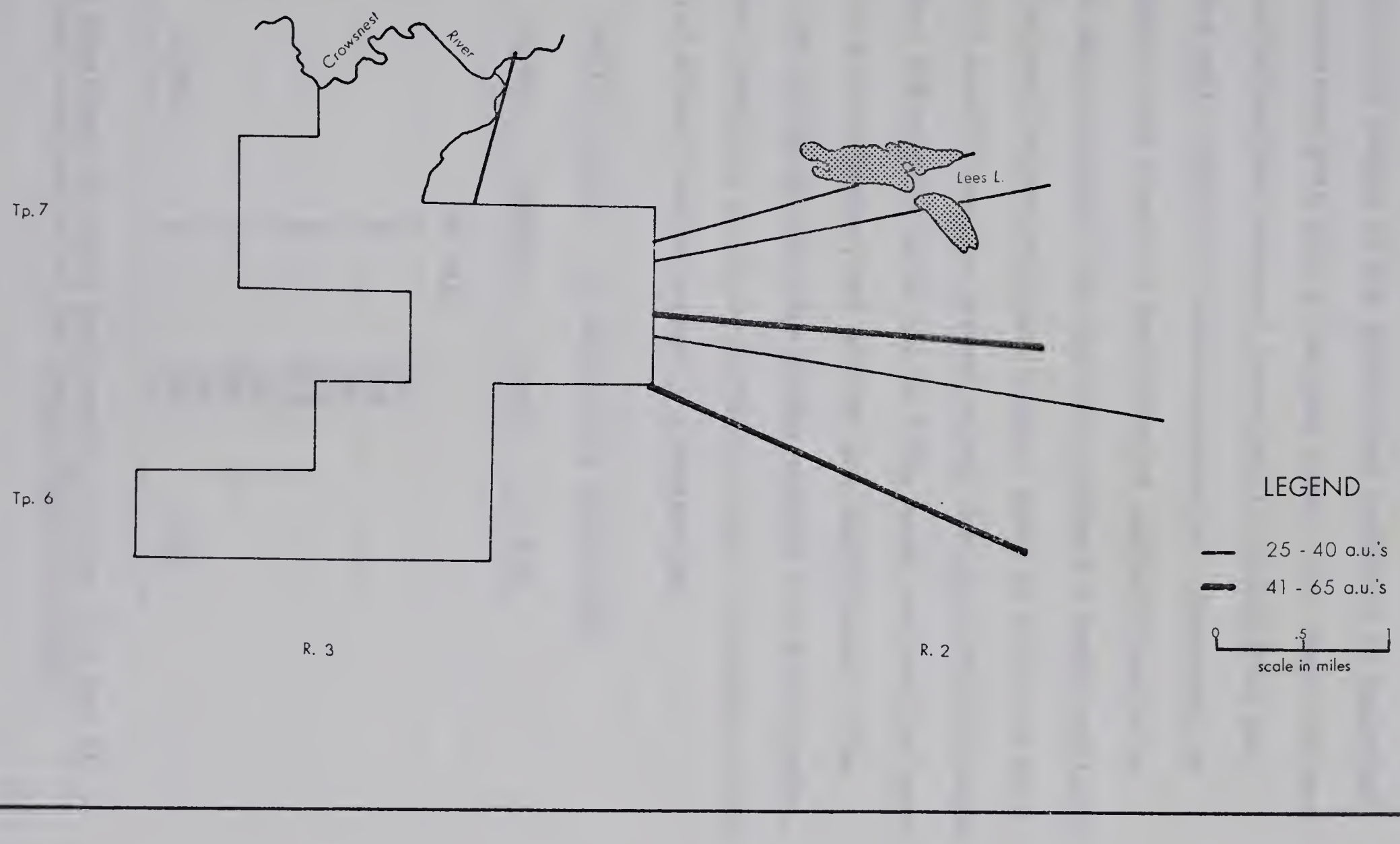


Fig. 13



movements to and from the pasture.

The physical nature of the pasture may generally be described as rugged to mountainous with only a few open areas. The level and open areas are situated along the Crowsnest River and its tributaries and have been, in the past, subject to severe overgrazing. Sparseness of vegetation, however, is not always an indication of over utilization in this pasture, as many areas will not physically support a dense vegetation cover. Depending upon factors of slope, aspect, depth of soil, and tree cover the carrying capacity varies between thirty-two and fifty-five acres per head per year, the average being set at fifty acres per head per year. Grasses present are Idaho fescue, oat grasses and wheatgrasses. Tree cover is poplar and willow on the lower slopes grading into pine, spruce, and fir at higher elevations and on north facing slopes. Bearberry, juniper, and other low shrubs form the understory vegetation.

TABLE 4. GRAZING RECORD - FIR GROVE STOCK ASSOCIATION

Year	Acres	Members	Head	A.U.M.
1942-1963		No Data		
1964		7	222	
1965		6	204	
1966		7	192	
1967		6	302	
1968		5	212	
1969		7	192	
1970		7	193	
1971		5	196	
1972	4,343	6	196	700

Source: Alberta Department of Lands and Forests, Grazing File for Fir Grove Stock Association and the Annual Report 1943-1973.



Concern has been expressed recently by the association members over the possible loss of the entire Crowsnest Forest Reserve as well as their own lease to competing uses such as recreation. The east slope hearings held at Lethbridge and Coleman during the summer of 1973 were instrumental in bringing to light the high degree of interest focused on the recreational potential of the eastern slopes. Most of the briefs submitted, accorded the highest priority to watershed maintenance. Compatibility of alternate uses varies inversely with the degree to which they impair the value of the area as a watershed. There were no representations made which dealt with the role of grazing specifically. Rather, grazing was mentioned as one of several alternate uses which could be compatible if carefully managed. The impression conveyed was that the role of grazing presently assumed must be reduced in the future. Thus, grazing would be assigned a lower priority rating among land uses in the eastern slopes in general and particularly within the Crowsnest Forest Reserve.

Castle River Stock Association. The Castle River Stock Association has an early history similar to that of the Fir Grove Stock Association. A long term grazing lease was issued to the Association in 1943 for a total of 4,497 acres. In 1947 the acreage was expanded to 6,318 acres. An additional 138 acres are presently operated in conjunction with the lease. Since its establishment, the number of members has varied between eight and eleven. The data gathered on actual pasture use is summarized in Table 5. Patterns of cattle movements are illustrated by Fig. 14.

The rather low carrying capacity of fifty-five acres per head per year for the pasture is a result of the dense tree cover over seventy per cent of the area as well as the hilly to sub-mountainous topography. Only twenty per cent of the area included is open land. In order to

CASTLE RIVER STOCK ASSOCIATION - CATTLE MOVEMENTS

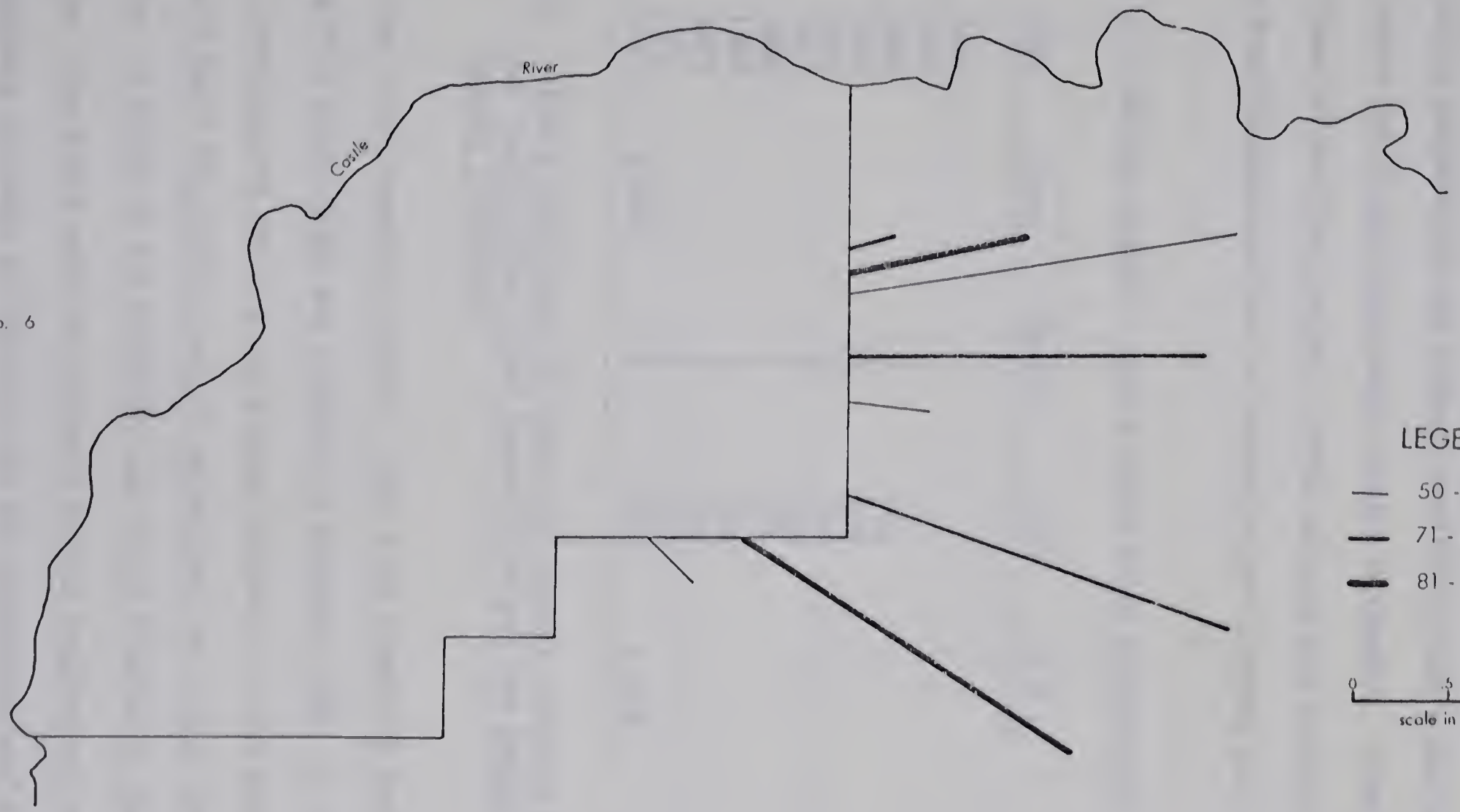


Fig. 14



increase productivity, discing and seeding were carried out on forty acres during the spring of 1972. Financial assistance was granted to the Association pursuant to the Federal Provincial Rural Development Agreement under the Range Improvement Project Agreement. Some logging is also allowed within the pasture. After an area has been cut over, preventive erosion measures such as reseeding are carried out.

TABLE 5. GRAZING RECORD - CASTLE RIVER STOCK ASSOCIATION

Year	Acres	Members	Head	A.U.M.
1943-1963				
1964		9	303	
1965		11	303	
1966		9	304	
1967		9	303	
1968		9	303	
1969		9	303	
1970		9	324	
1961		8	293	
1972	6,297	8	290	1,315

Source: Alberta Department of Lands and Forests, Grazing File for Castle River Stock Association and the Annual Report 1944-1973.

Ross Lake Community Pasture. Ross Lake Community Pasture situated in the Milk River Ridge was created in October, 1944. A lease was issued for twenty years and has since been renewed. At the organizational meeting, held April 30, 1944, a set of guidelines for policy formation was drawn up. A board of six directors was to be elected to provide administration. The Board would be governed by the regulations as set forth by the Department of Lands and Forests but the Department would in turn support the decisions made by the Board unless contrary to the by-laws.

Membership would be restricted to bona fide farmers residing within the boundaries formed by the St. Mary River, the Milk River Ridge, the forty-ninth parallel, and the northern boundary of School Division eight. All membership and grazing fees were to be paid in advance for the full season. All cattle were to be tagged upon entry into the pasture. Any animal which could not be controlled would be subject to removal by the herder if the owner did not take it home upon request. Since 1944, numerous additions have been added to the original list of regulations. These are:

1. July, 1947 - Any one who cannot deliver cattle on the specified dates of delivery will arrange with and pay the secretary for any extra time put in outside of the above dates (dates set at the annual meeting).
2. April, 1948 - The maximum number of cattle entered per member be set at twenty head.
3. March, 1950 - All members shall support the Directors' resolution that any member who does not comply with the by-laws shall have his membership forfeited for one year.
4. March, 1952 - All cattle entered must bear the member's registered brand.
5. March, 1953 - All cattle must be sprayed upon entry. Any person entering cattle subsequently must offer evidence that the cattle have been sprayed on or at a later date than the opening date.
6. April 11, 1953 - Members who apply for grazing privileges and who are acceptable to the Board as bona fide members but who have not been consistent users of the pasture in the past be limited to a maximum of ten head of cattle for the 1953 season with the privilege of increasing the allotted number when more room is available.

7. April, 1953 - The number of cattle allowed in the pasture at any one time during the season not to exceed forty head per member (Minutes Book, Ross Lake Community Pasture Association).

TABLE 6. GRAZING RECORD - ROSS LAKE COMMUNITY PASTURE

Year	Acres	Members	Head	A.U.M.
1944-1961		No data		
1962		?	?	2,285
1963		?	?	2,310
1964		32	422	2,310
1965		30	455	2,275
1966		28	465	2,076
1967		26	441	2,155
1968		24	501	2,028
1969		34	597	2,142
1970		30	501	1,959
1971		29	516	2,028
1972	4,473	29	576	2,150

Source: Alberta Department of Lands and Forests, Grazing File for Ross Lake Community Pasture and the Annual Report 1945-73.

As previously stated the Ross Lake Community Pasture is favored by its situation for the growth of native grasses. Comprising 4,473 acres the lease covers sections five, six, seven, fifteen, sixteen, seventeen, and eighteen of township two, range twenty-two, west of the fourth meridian. Fig. 15 indicates the patterns of cattle movements to the pasture.

The pasture is fenced into four fields to accommodate different age groups and types of cattle such as wet cattle, dry cattle, and steers. A shortage of natural water sources has necessitated the construction of several dugouts and dams. Other improvements include corrals, sheds, and a small house for the rider if he is from outside the district.

ROSS LAKE COMMUNITY PASTURE - CATTLE MOVEMENTS

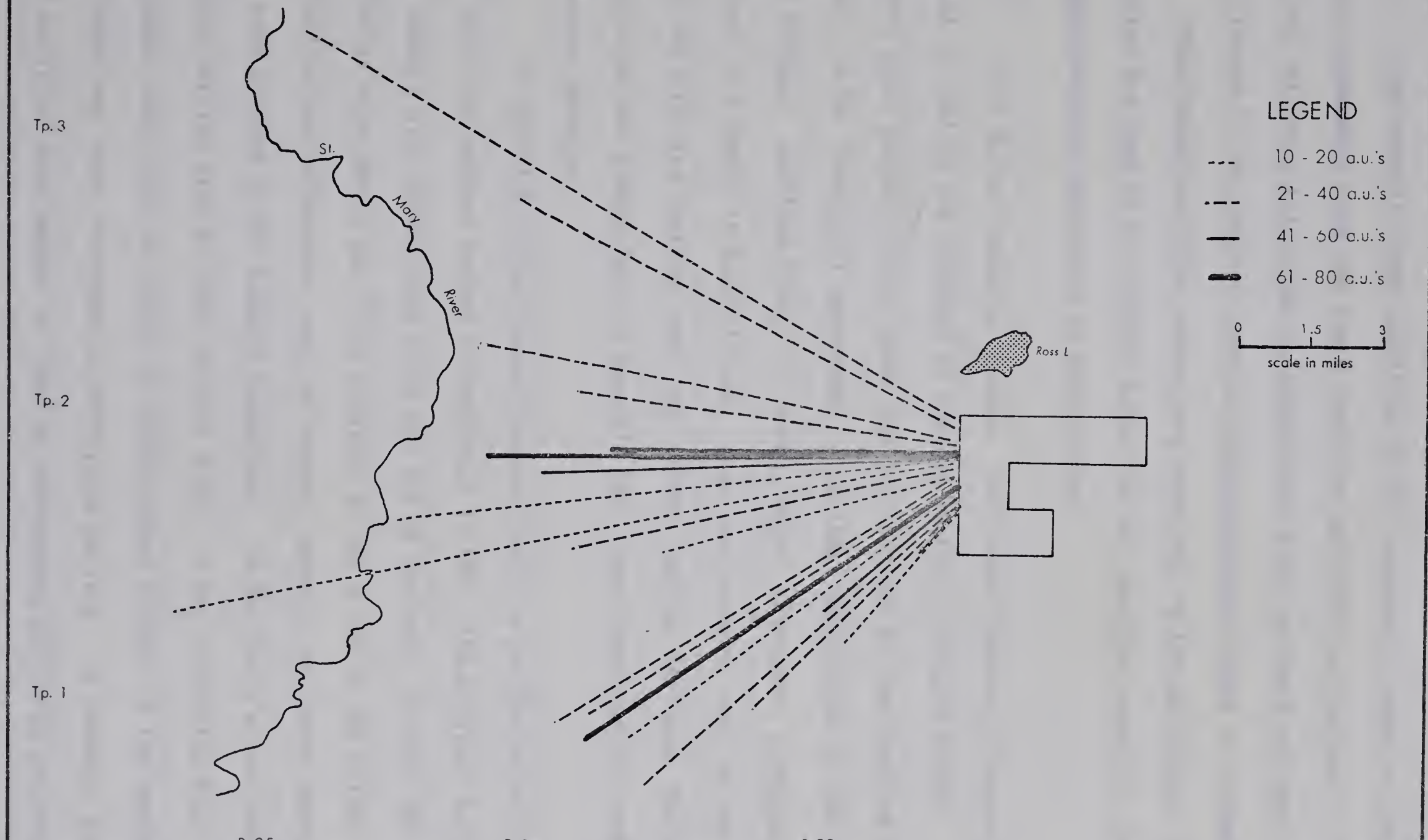


Fig. 15



The overall range condition of this pasture is good; in 1958 it was recommended that the range condition warranted an increase in the stocking rate from thirty-two to twenty-four acres per head per year. Rough fescue is the dominant species while bluebunch fescue is co-dominant. Wheatgrasses and blue grasses are prevalent in the wet draws. Utilization has been at or slightly below the set carrying capacity. Table 6 summarizes data pertaining to pasture use.

Poll Haven Community Pasture. Poll Haven Community Pasture was created in 1947 by the transfer of sixteen sections included within Waterton Lakes National Park, under the jurisdiction of the Dominion Government, to the Provincial Government. The legal description of the area is as follows: sections five, six, seven, eight, seventeen, eighteen, nineteen, and twenty in township one, range twenty-seven, west of the fourth meridian and sections one, two, eleven, twelve, thirteen, fourteen, twenty-three and twenty-four in township one, range twenty-eight, west of the fourth meridian.

In addition to the regulations set forth in the "Societies Act" under which the members became incorporated in 1948, the original forty-three members also established their own set of by-laws. To join the association each person was first required to pay a fee of one dollar. Construction and maintenance costs of fences, corrals, and other improvements were assumed by the members themselves. On the basis of an average of eleven working days at seven dollars a day, it was calculated that each member would have an equity of seventy-seven dollars in the pasture. This figure was later increased to ninety-two dollars. At present, the actual equity of each member is close to one-hundred and forty dollars,

the additional forty-eight dollars having been added by payment to the association for seismograph work carried out in the pasture.

Since 1948 the number of members has been kept almost constant though some are inactive at times. New members are allowed to join only when a former member leaves the association. When a member leaves, he is issued a cheque equal to his share or equity in the pasture and the new member must conversely pay the association an equal amount upon joining. If a member retires from farming, leaving the farm to a son or daughter, he or she is given the first option to purchase that share. In the case that the farmer sells his land, the purchaser is given first choice, unless he is already a member of the association. Appendix III gives a more complete listing of the by-laws.

As is the situation with most community pasture organizations, Poll Haven functions as a summer pasturing ground for local bona fide farmers and ranchers. It is of particular importance financially to the small operators as it allows them to make more efficient use of their own land. Fig. 16 illustrates the patterns of movement of cattle to and from the pasture. Owing to its location relative to the United States to the south and to Waterton Lakes National Park to the west, most of the members reside to the north and northeast of the pasture. Table 7 presents a record of actual use.

The history of land use within the boundaries of this pasture has been subject to a great deal of controversy. This is due as much to its physical landscape as to its proximity to an intensively used recreation area.

Poll Haven encloses a block of land four miles square. From a distance the region stands out as tree covered ridge. The highest

POLL HAVEN COMMUNITY PASTURE - CATTLE MOVEMENTS

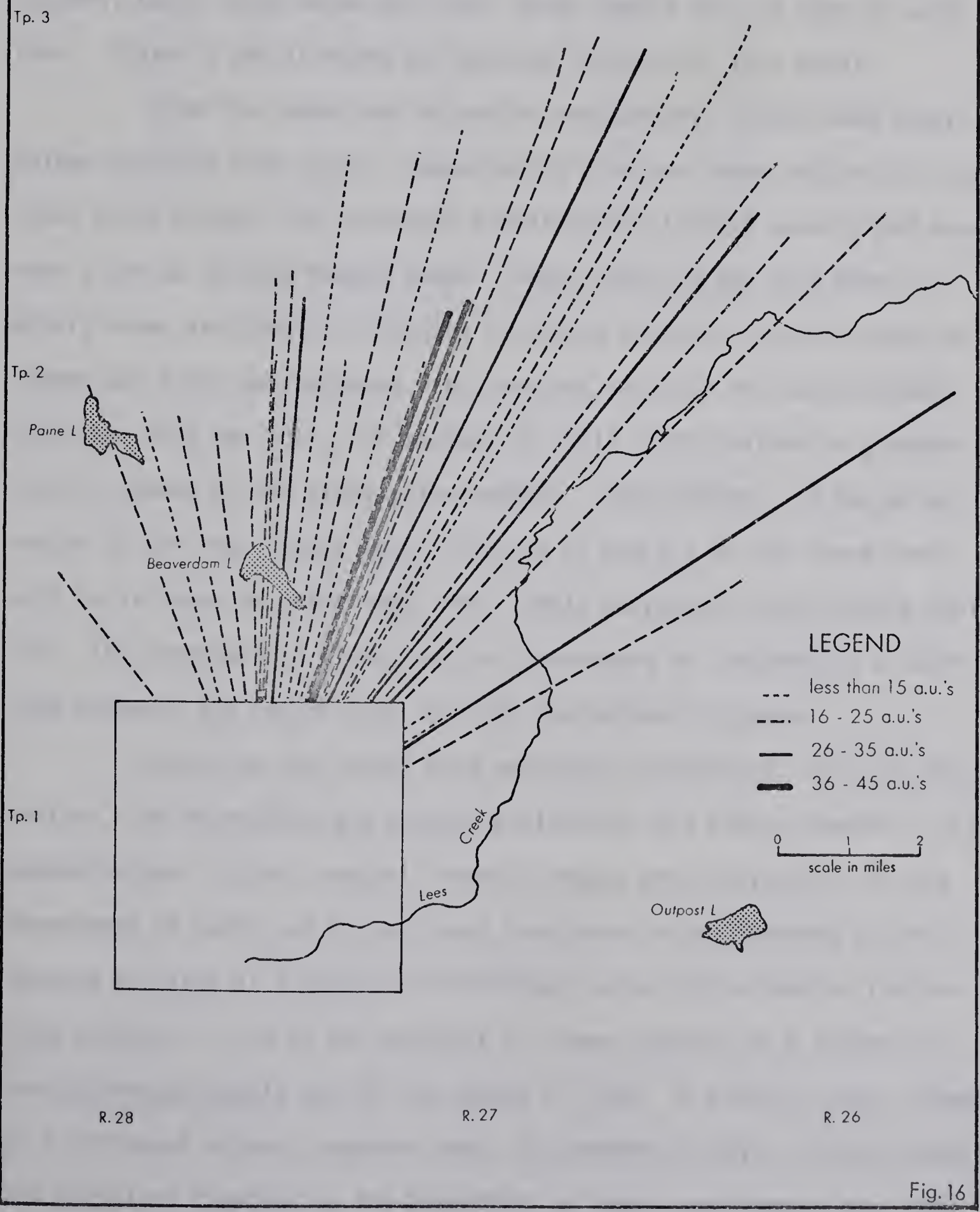


Fig. 16



elevation is 5,900 feet while the lowest is 4,600 feet thus giving a local relief of 1,300 feet. Slopes are generally north and east facing. This has favored tree growth and has enhanced the value of the area as a watershed. Lee's Creek and Tough Creek are the two major drainage systems; Lee's Creek being the local water supply for the town of Cardston. Plates 9 and 10 might be referred to again at this point.

From the comparison of aerial photographs, it has been ascertained that the tree cover, predominantly pine and aspen poplar with occasional white spruce, has increased significantly in both density and area over a period of only twenty years. Grass cover in the open areas is mainly brome and timothy. Despite a reduced carrying capacity owing to timber and brush encroachment, the carrying capacity now being seventy acres per head per year, the pasture is still highly valued as a summer grazing ground by the association members. Nevertheless, it can be expected in the near future that a portion if not all of the lease area will be assigned to other uses, most likely recreation and wildlife habitat. The steepness of slopes and the importance of the area as a watershed decrease the feasibility of range improvement projects.

Competing uses other than watershed maintenance, wildlife protection, and recreation are seismic exploration and timber removal. Representations, by both special interest groups and individuals, to the Department of Lands and Forests have been made in the interest of preserving the area as a natural or wilderness area with extensive recreation permitted. One of the earliest of these appeared as a letter in the Lethbridge Herald during the summer of 1960. A similar letter, though by a different author, appeared again in December of 1962. Other requests and petitions directed to the Department of Lands and Forests have come

TABLE 7. GRAZING RECORD - POLL HAVEN COMMUNITY PASTURE

Year	Acres	Members	Head	A.U.M.
1947-1963		No Data		
1964		43	702	?
1965		53	1,271	?
1966		53	1,271	?
1967		43	814	?
1968		42	715	2,039
1969		43	616	1,655
1970		43	589	1,921
1971		42	583	1,478
1972	10,462	42	647	1,794

Source: Alberta Department of Lands and Forests, Grazing File for Poll Haven Community Pasture and the Annual Report 1948-73.

from the following individuals and groups:

(1) April, 1969 - Mr. W. Pitcher, representing numerous service and sports clubs in the Crowsnest and Lethbridge areas, requested that a Provincial Park be established at Poll Haven.

(2) June, 1969 - Mrs. R. Coleman of Magrath requested information re: purchasing or leasing land for a cabin site in Poll Haven.

(3) August, 1970 - Mr. D. Steed, District Agriculturist at Cardston, requested permission to utilize an old ranger's cabin on Lee's Creek as a permanent Boy Scout camp.

(4) November, 1970 - Representatives of the Cardston Snowmobile Club requested a ninety-nine year lease for recreational activities in the Community Pasture.

(5) November, 1972 - Mr. Gordon Sloan of Cardston circulated a petition in southwestern Alberta during the summer of 1972 requesting that Poll Haven be used strictly for public recreation and wildlife habitat protection.

At present, the members have yielded to public pressure to some degree and have indicated their approval of use of the area for recreational purposes. This is so provided that such use does not interfere with the primary use of the pasture, that is, the grazing of cattle (refer to Plate 11).

Though some interest groups would have it that no grazing be allowed, such usage not being considered compatible with recreation, the economic benefits accruing to local stockmen must be considered as well in determining the optimal use. It has been recommended by a district supervisor of the Department of Lands and Forests (1971) that controlled grazing be allowed, the extent being dependent upon tree cover and remaining open areas. On the other hand, it is questionable whether the presence of trail bikes and snowmobiles would not result in as much environmental damage as controlled grazing and they are certainly less compatible with the wilderness concept.

It would appear that in the future, the best use would be for watershed protection and preservation of the area as a natural environment area. This would involve the prohibition of any intensive agricultural uses, logging operations, seismic activity, oil wells and mining, road construction, dam construction, cottage development, or intensive recreational uses.

Boundary Creek Grazing Association. The Boundary Creek Grazing Association came into existence in 1956. It is located on 11-1-27-W4, and contains approximately one section or 637 acres. Between the years 1966 and 1970 an additional 200 acres were operated in conjunction with the leased Crown land. This pasture is the smallest in area of the seven



Plate 11. August 18, 1972 - The area under lease by the Poll Haven Community Pasture Association attracts numerous individuals and groups seeking recreation. The Cardston Snowmobile Club has arranged to use the pasture during the winter and maps of the trail routes and cabin locations are available at the gate. The posted notice was also published in the Cardston Newspaper and reads as follows:

Re: Pole Haven Community Pasture

No travel when roads are wet-

No camping-

No hiking or trail rides-

No shooting while cattle in pasture - without permission.

Due to certain parties abusing the above privileges it has become necessary to impose these regulations. It is hoped that all will co-operate that we all may benefit.

discussed.

Prior to 1956, Section 11 was held under grazing permit by Mrs. Pearl Shattuck of Boundary Creek, the permit carrying the notation, "Grazing Permit has been granted to Mrs. Pearl Shattuck for the benefit of the settlers in the vicinity". In 1956, at the suggestion of the Lands Division, Department of Lands and Forests, the six individuals placing stock on the section during the summer months became incorporated under the "Societies Act". They then proceeded to apply for a grazing lease. This was granted for a period of ten years effective April, 1956. In 1966 the lease was renewed for a similar term. The shareholders declared that each member would be allowed to place twenty head of cattle and two horses in the pasture during the summer months. In subsequent years the number of animal units per member has been adjusted to correspond with the number of members. The date of entry has generally been June first though the date set for removal of the animals has varied between September first and October first. Fig. 17 shows the number and origin of cattle moved to the pasture, while Table 8 summarizes available data relating to actual use.

Before 1959 the association operated without a formal set of by-laws. Problems which arose in the formative years over membership eligibility, in particular, clearly illustrated the expediency of drafting a set of regulations which might be adhered to in the future. In essence the by-laws of the Boundary Creek Grazing Association state:

(1) Any one who lives within eight miles of the grazing lease and who owns or leases land and has been there for three years may apply for membership.

(2) Any one who has been working and living in the district for ten

BOUNDARY CREEK GRAZING ASSOCIATION -

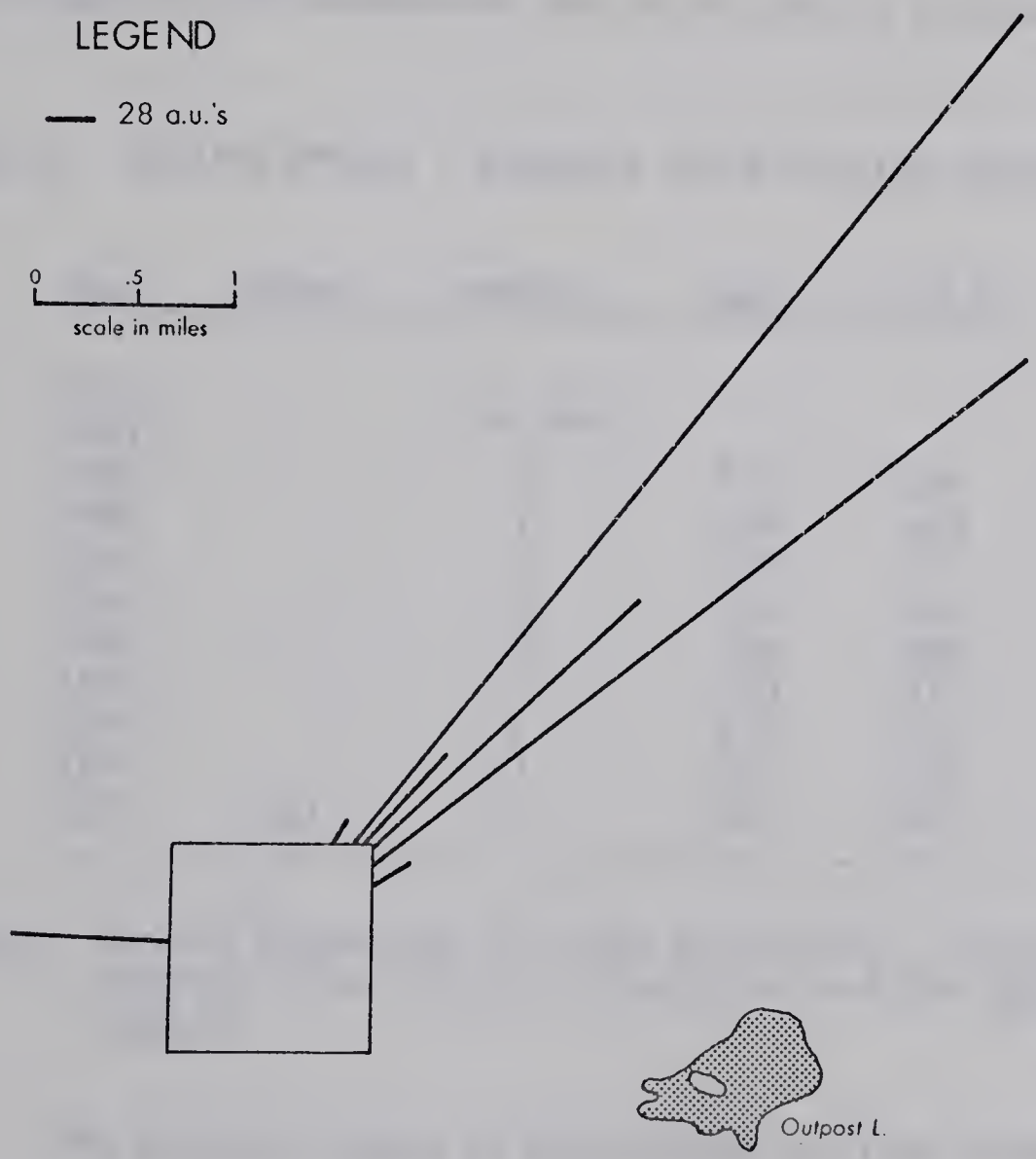
CATTLE MOVEMENTS

Tp. 2

LEGEND

— 28 a.u.'s

0 .5 1
scale in miles



Tp. 1

Outpost L.

R. 27

R. 26

Fig. 17

years and has no place to pasture his stock may apply for membership.

(3) Any member with only one quarter section of land may take in stock to pasture on his own land (this would serve to increase income as he could rent his private land for more than what it costs to use the community pasture).

(4) The shareholders have the right to expel any shareholder for any reason or cause which the society deems reasonable.

(5) Applications for membership are to be sent in a letter to the board.

TABLE 8. GRAZING RECORD - BOUNDARY CREEK GRAZING ASSOCIATION

Year	Acres	Members	Head	A.U.M.
1955-1963		No Data		
1964		9	113	539
1965		7	104	403
1966		9	131	?
1967		8	114	402
1968		8	140	496
1969		7	120	419
1970		7	113	393
1971		7	101	410
1972	637	7	101	410

Source: Alberta Department of Lands and Forests, Grazing File for Boundary Creek Grazing Association and the Annual Report 1956-73.

The physical nature of the pasture, rolling aspen parkland, is suitable for extensive grazing. From field inspections carried out by government personnel in 1962 and again in 1965 and 1969, the carrying capacity was determined to be between twenty-four and forty acres per head per year. The section is roughly one half poplar and willow brush. The open areas have a grassland community of Parry oat grass, Idaho fescue,

and wheatgrasses. While the range condition in both 1962 and 1965 was reported as only fair, by 1969 the increase in rough fescue indicated an improvement in condition. This improvement came about mainly through improved management practices.

The recreational potential of this land is increased by its close proximity to (Police) Outpost Lake, the site of a recent Provincial Park development. Expansion of the pasture is inhibited by the presence of deeded land on all sides and the reservation of section six, range twenty-six, township one, west of the fourth meridian for recreational purposes.

Waldron Grazing Co-operative. The Waldron Grazing Co-operative was formally established in 1963 with the transfer of the ranch assets including a Crown lease from W. Griffiths of Calgary to a co-operative group of farmers and ranchers in southern Alberta. The agreement of sale specified that the shareholders would pay, over a period of twelve years, one million dollars. Half of this sum was backed by the government. The Waldron (formerly Walrond) consists of seventy sections, forty-five of which are patented land. It is located in the Porcupine Hills and extends for a considerable distance north of the Municipal District of Pincher Creek.

In general the area is brush covered with open grassland areas concentrated on the south facing slopes. Forage species are rough fescue, timothy, and bluegrass. North facing slopes are often treed - willow, poplar, pine, fir and spruce being common. Local infestations of larkspur, a poisonous plant which can cause losses prior to early August, present a range management problem. The carrying capacity varies locally but averages thirty-two acres per head per year, though as in other areas

timber encroachment is slowly reducing the area of open grassland.

Membership in the co-operative requires a shareholder to have at least five shares, originally valued at one thousand dollars each but because of the success of the ranch now worth half as much again. The maximum number of shares which an individual may possess is set at twenty-five. This reduces the possibility of one individual or one family owning a controlling interest in the ranch. Each share carries with it the privilege of grazing 4.4 animal units per season.

The Waldron is the only grazing association in the study area which permits winter grazing. In this case twice as many animals are allowed per share and if necessary, supplementary feed is supplied. Most of the winter grazing occurs in the high hills which are not normally used during the summer months of June through October.

At present, the pasture provides grazing for 4,000 to 5,000 cattle or more than 22,400 animal unit months of grazing, owned by ninety-five members. Table 9 shows past use of the co-operative for grazing. Only twelve of the members reside in the study area, others coming from as far away as Trochu, Vulcan, and Coaldale. No attempt has therefore been made to show movements to and from the pasture as was done for the other pastures. However, it should be noted that the policy is to allocate grazing areas nearest to the rancher's residence so that members in the study area use the southern end of the pasture or ranch. To facilitate separation of herds, fencing has been completed to form thirty-five pastures. For a more complete list of the regulations governing the operation of the ranch, Appendix III should be referred to.

TABLE 9. GRAZING RECORD - WALDRON GRAZING CO-OPERATIVE

Year	Acres	Members	Head
1964	15,910	77	1,230
1965		96	4,977
1966		96	5,163
1967		95	5,527
1968		95	5,527
1969		95	5,527
1970		95	4,253
1971		95	4,253
1972	15,581	95	?

Source: Alberta Department of Lands and Forests, Grazing File for Waldron Grazing Co-operative and the Annual Report 1964-73.

Butcher Creek Grazing Co-operative. The Butcher Creek Grazing Co-operative was incorporated in November, 1964. At this time purchase was made of 601 acres plus improvements by the Association for the sum of 45,350 dollars. The transfer of a Crown grazing lease from E. Clarke to the Association accompanied the purchase. This effectively increased the acreage to 1,984 acres. In 1965 the lease area was amended, thereby adding forty acres to the pasture and in 1969 the lease was renewed for twenty years. The legal description of the lease is as follows: NW 13, N 23, SW 23, NW 24-4-1-W5. Beyond the land owned by the Association and the land held under a Crown lease, additional private land is rented to give a total acreage of 2,230.

Regulations established by the association govern membership, fees, the animal units allotted per member and the grazing season. The original membership consisted of ten ranchers or farmers. Priority is given to people living close to the pasture. Each member runs an equal number of animal units and pays an equal amount, the pasture being operated at cost. The pasture is used strictly for summer grazing from the

first of June to the middle of October. Table 10 summarizes the data related to actual grazing use and Fig. 18 illustrates the patterns of movement to the pasture.

Within the pasture there are five basic range types; improved pasture, low wetlands, open native grasslands, medium dense to sparse aspen type, and dense aspen and conifer stands. In this case, deeded pasture is more productive than leased land as all the cultivated or tame pasture is on private land. Over utilization in the past has, however, reduced the potential productivity of such areas. There are approximately fifty acres of improved pasture. Carrying capacity on the tame pasture is estimated at twelve acres per head per year.

Low wetlands afford lush growth but it is of poor quality. They also have a stocking rate of one head per twelve acres per year. Open native grasslands occupy less favorable sites for growth but the grasses are higher in nutrient content. Dominant species are rough fescue, bluegrasses and Parry oatgrass. The carrying capacity averages twenty acres per head per year and this type occurs on approximately 280 acres. Aspen Parkland is by far the most prevalent vegetation complex and it occupies some 1,440 acres. The understory vegetation consists of some timothy as well as native species of grass and may be rated at thirty-two acres per head per year. Densely treed areas produce very little forage and are therefore poor range.

In 1972 an application to clear 150 acres was approved under the Range Improvement Assistance Program. The project when completed cost a total of 3,600 dollars, the Federal and Provincial governments and the association each paying one third of the total amount.

BUTCHER CREEK GRAZING CO-OPERATIVE -

CATTLE MOVEMENTS

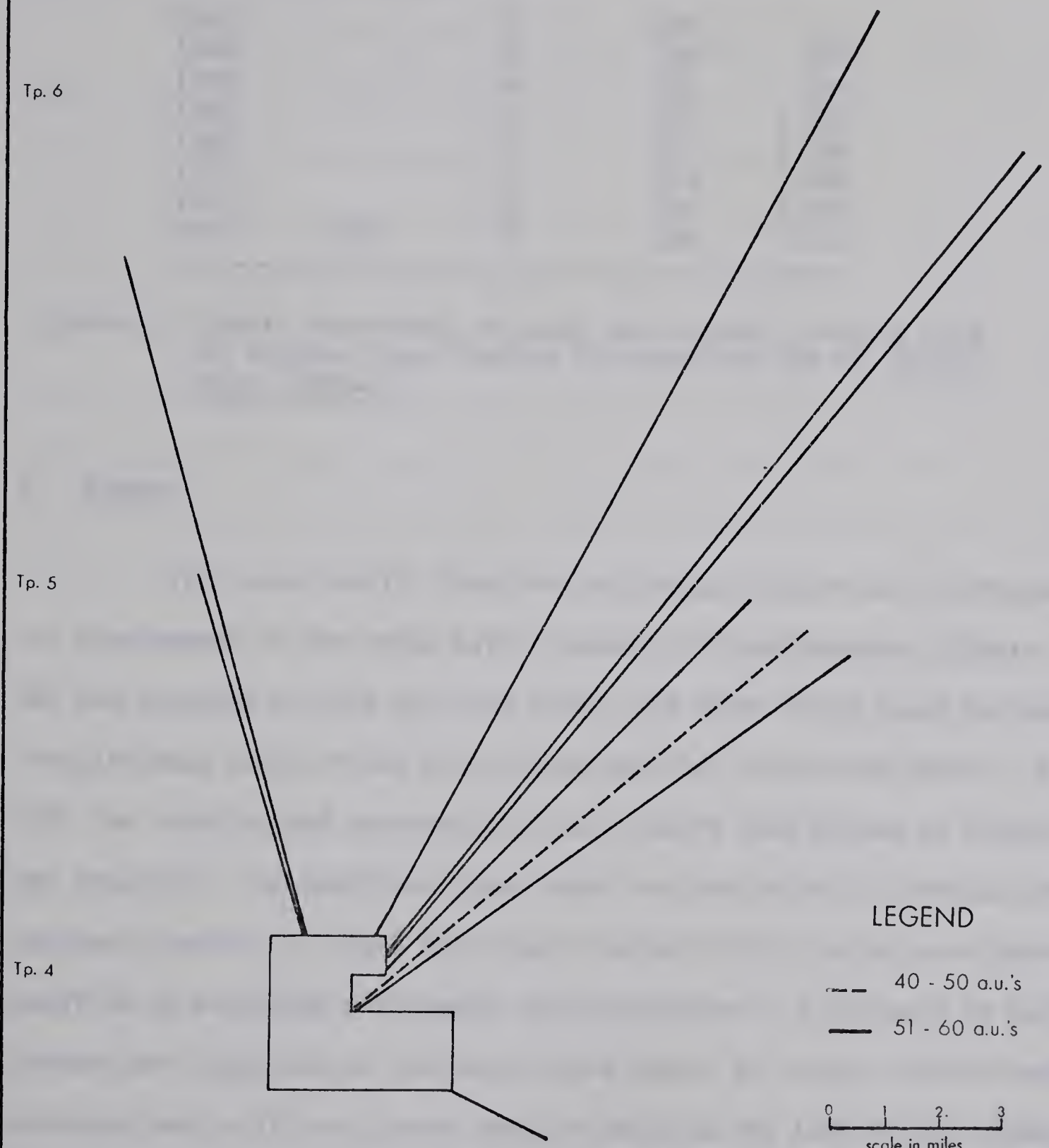


Fig. 18



TABLE 10. GRAZING RECORD - BUTCHER CREEK GRAZING CO-OPERATIVE

Year	Acres	Members	Head	A.U.M.
1965		10	239	?
1966		10	236	995
1967		10	220	930
1968		12	231	1,020
1969		11	267	1,050
1970		11	229	1,060
1971		10	268	1,157
1972	1,432	10	268	1,157

Source: Alberta Department of Lands and Forests, Grazing File for Butcher Creek Grazing Co-operative and the Annual Report 1965-73.

E. Summary

The use of public land for grazing has historically influenced the development of the range cattle industry in southwestern Alberta. It was the presence of free and open range land which first lured the American cattleman north of the forty-ninth parallel in the mid 1870's. By 1881 the industry had expanded to a point where some degree of regulation was required. The twenty-one year lease was instituted to provide the necessary control. Though the liberal terms of this policy were soon modified to encourage settlement, thus resulting in a decrease in average acreage per lease but an increase in the number of leases, significant acreages were still held under grazing lease at the turn of the century. By 1910 however, agricultural settlement had progressed to the stage where grazing leases were granted only for land inspected and reported as unfit for cultivation. The year 1910 also marked the first regulated use of the forest reserve lands for grazing by domestic livestock. Prior to this date, the ranchers had regarded the forested areas as free and open range

and had used this region for summer grazing. In general, the land use patterns which currently exist had largely been established by the second decade of the twentieth century.

The eastern slopes of the Rocky Mountains still provide the major percentage of summer range land, though a second area of importance also occurs in the southeastern part of the study area. At present, more than 15,000 head of cattle (45,086 animal unit months) are sent to the Crowsnest Forest Reserve each spring. This represents over eight per cent of all beef cattle within the Municipal Districts of Pincher Creek and Willow Creek, the region within which most of the users reside. In close proximity to the Crowsnest Forest Reserve and within the foothill belt, are located six of the eight public pastures discussed under section D of this chapter. Together, these eight pastures provide grazing for 11,532 head of cattle (Alberta Department of Lands and Forests, 1974). Long-term grazing leases are also mainly concentrated within the eastern slopes with a secondary concentration being in the Milk River Ridge.

Within Alberta, the Lands Division of the Department of Lands and Forests is responsible for the administration of public lands for grazing outside the forest reserves. The "Public Lands Act", a copy of which has been included in Appendix III along with other acts and by-laws of the community pasture associations, sets out the regulations for grazing leases. Under the terms of this act a grazing lease may be granted for a period not exceeding twenty years on land which is best suited to the grazing of domestic livestock. An applicant, to be eligible, must be eighteen years of age or over and a Canadian citizen or British subject. In 1970 the Act was amended to permit an individual to have under lease no more land than required to graze six hundred head of cattle

for one year, unless the interests of other farmers or ranchers would not be adversely affected. Lessees pay an annual rent to the Department, which is based on the grazing capacity of the land, the average weight gain of range cattle, and the average price of range cattle sold during the preceding year, or portion thereof, on the Calgary market. Grazing lessees are given priority in renewing their leases if the land is not required for a higher priority use.

The Lands Division also issues and administers annual grazing permits which may be granted to any resident. These permits are usually issued on land under reservation for purposes such as recreation, wildlife or waterfowl habitat, or water resources. Such permits can be cancelled upon giving the permittee reasonable notice. The rental rates per acre are equal to the rates charged for long-term grazing leases.

Regulations which apply to an individual holding a grazing lease also apply with few exceptions to a grazing association operating a community pasture. Grazing leases, however, held by community pasture associations are not bound by the size restriction outlined in Section 106 of the "Public Lands Act". This Act also gives the Minister of Lands and Forests the authority to order an association to graze the livestock of a dismissed member if the Minister considers the dismissal to be unfair and if expedient, to reduce the total allotment per member to twenty head of cattle for the grazing season. A community pasture association, consisting of five or more members, is responsible for proper management of the pasture. Assistance for range improvement may be obtained from the Federal and Provincial governments through an ARDA program.

Provincial grazing reserves are designed to provide pasture facilities for relatively small established livestock operators on areas

which are not suitable for cereal production and require heavy investment. The government provides fencing, range improvements, corrals, and a residence for a paid full time pasture manager. Rather than paying an annual rental per acre, grazing reserve patrons pay a fee on a per head per month basis. An advisory committee elected from the patrons assists the Lands Division in the operation of the reserve.

While the demand exists for the development of more community pastures and grazing reserves within the study area, particularly to meet the needs of cattlemen in the area south of Cardston, and near Glenwood, there is little chance that the supply will be forthcoming. Most of the suitable land is privately owned and operated. Crown land is not available in sufficient acreages to allow for the establishment of large public pastures.

V. CHARACTERISTICS OF PRESENT CATTLE MOVEMENTS AND SEASONAL PASTURE USE

This chapter will deal largely with information obtained from the questionnaire returns. The extent and characteristics of cattle migrations, both to private and public land, will be discussed in greater detail as will the relationships between the use of private and Crown land for grazing. Aspects of production such as scale of operation, type of enterprise, and intensity of production are discussed in relation to the usage of seasonal pastures. The spatial distribution of the sample population (Questionnaire A), on which the following statements are based, is shown in Fig. 19. The information obtained from Questionnaire B is based on a smaller population; that is, seventy-eight compared to two hundred and fifteen respondents.

A. The Extent and Characteristics of Present Cattle Movements

The years of the large round-ups and drives have long passed in southwestern Alberta. The annual fall round-up at the Twin River Grazing Reserve and the Gap Allotment in the Crowsnest Forest Reserve are, however, somewhat reminiscent of the earlier events. These are depicted in Plates 12 and 13. A more common manifestation of present seasonal movements is the sight of a small herd of cows with calves being driven along a country road during the months of May and June. Most of these herds, such as the one shown in Plate 14, are destined for the cooler and more humid foothill pastures.

Of the sample population studied, sixty-nine per cent (146) reported that they moved some or all of their cattle to a seasonal pasture. It should be made explicit at this point that only beef cattle are moved; at present there are no known instances in which

DISTRIBUTION OF THE SAMPLE POPULATION

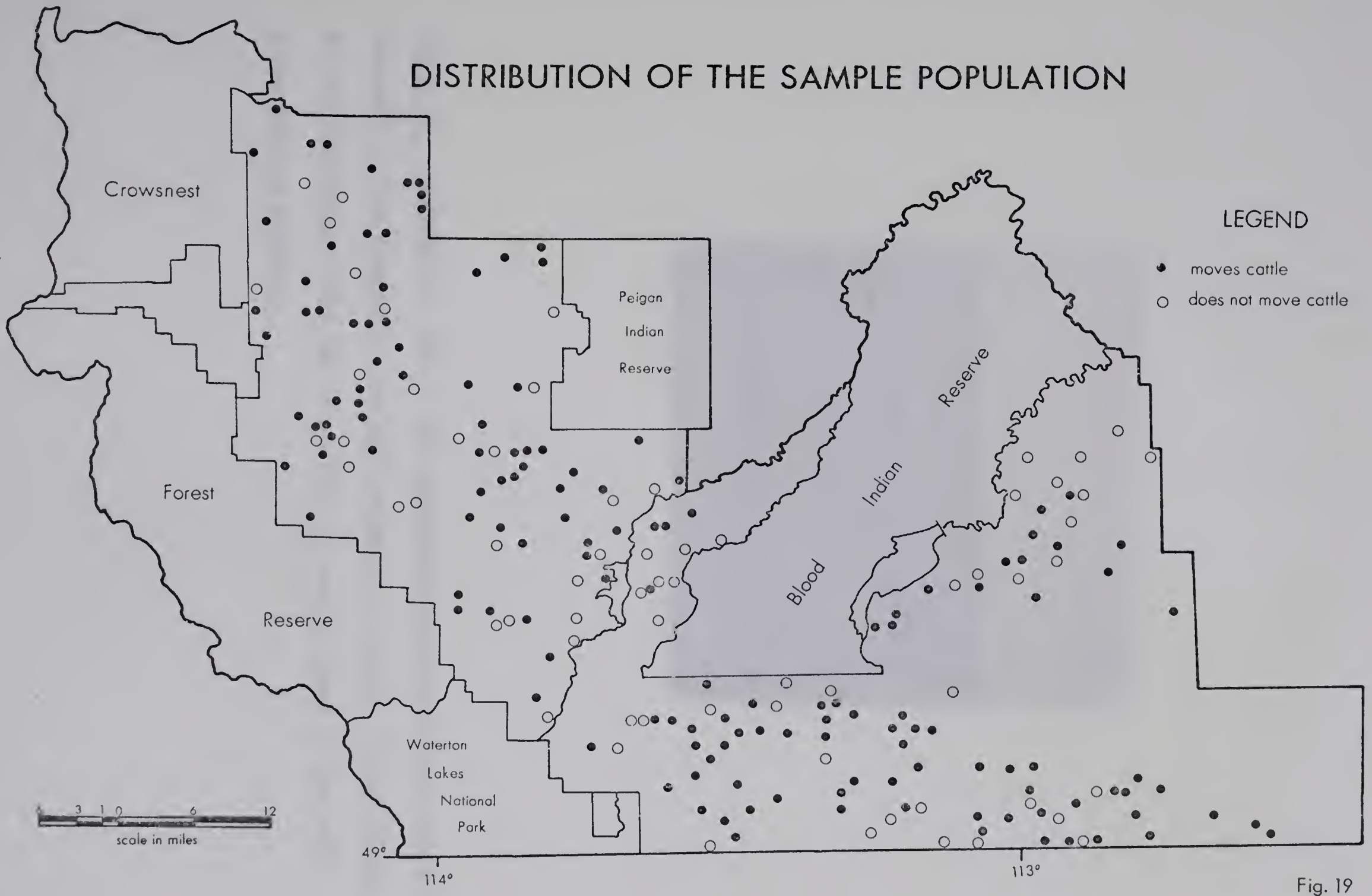


Fig. 19





PLATE 12. November 1, 1972 - This photograph represents one aspect of seasonal cattle movements, the fall round-up. Located in the valley of the Milk River, this set of corrals is one of three in the Twin River Grazing Reserve.



Plate 13. October 14, 1972 - The spectacular fall round-up of cattle from the Gap Allotment in the Crowsnest Forest Reserve often draws an interested group of viewers from throughout southwestern Alberta. This particular herd was the last to be cut out and sets out for home pastures in the mid-afternoon.



Plate 14. June 11, 1972 - A common sight in spring, as illustrated by this photograph, is the trailing of a small herd of cows and calves along country roads. This herd is destined for the cool foothill pastures. Location of this scene is several miles to the north of Police Outpost Lake.

dairy animals are moved. An additional thirteen percent (27) of the respondents indicated that while they had once moved their livestock to seasonal pastures, they no longer do so. With reference to both past and present movements, the percentages for the Municipal District of Pincher Creek alone were slightly higher than those for the Municipal District of Cardston. This difference possibly reflects the variation in types of enterprise between the two areas.

The decision to discontinue the use of seasonal pastures was often made as a result of a combination of factors. Included among these were instability of tenure on rented private land, rising costs of pasture land, dissatisfaction with the operation of public pastures, reduction in scale of operation or modification in type of enterprise, fear of livestock losses and disease, and loss of summer pasture due to other circumstances. Though in each case the details vary, reasons given for discontinuing the use of seasonal pastures may be grouped under several general categories. Where possible, only the major factor has been considered. Twenty-eight per cent of those who formerly moved their animals to seasonal pastures, stated that they no longer did so as they had either lost or given up the leased or rented private pasture land. Though increased cost was the most frequently stated reason for loss of the pasture land, one person stated that he gave up his lease due to objections raised over the trailing of cattle along roads while, in another case, the lessor decided to use the land himself. An equal percentage (21%) of respondents discontinued use of seasonal pastures because (a) they were not satisfied with the operation of community pastures and/or grazing reserves, or (b) because they had sold or leased the land formerly used for seasonal grazing. Former

users of community pastures expressed discontent with the inadequate control of herd quality and diseased animals and with the small number of animals allowed per member in the pastures. A change in scale or type of operation accounted for seventeen per cent of the former users of seasonal pastures. With a change in market demand and preference for younger beef, few operations remain which pasture fatten steers until they reach two or three years of age. Thus, pasture formerly used during the summer is freed for other purposes. Reduction in scale is most common among farmers and ranchers close to retirement age. With a declining interest shown by young people in remaining on the farm, combined with the high cost of obtaining reliable hired labor, some of the older operators have found it necessary to reduce the scale of their operations to a size commensurate with their reduced working ability.

Forty-one per cent of those who formerly used seasonal pastures stated that they would resume seasonal movement of their herds if suitable land was available at a reasonable cost.

As previously noted, seasonal pastures most often refer to summer pastures in southwestern Alberta. Except for the Waldron Grazing Co-operative, the grazing season on all Crown land includes only the summer months from May to October or a shorter period. Winter pastures are therefore on deeded land. The system of movement to seasonal pastures is in many cases complex, with a series of movements occurring between early spring and winter. While the majority of animals are moved to public pastures when they are first opened in the spring, a policy of deferred entry allows a member to graze twice the number of animals if they are entered halfway through the season. Use of this privilege is becoming more common with an increase in the popularity of

artificial insemination and the use of exotic breeds as in these cases the cows remain at home until bred in July. In either case, the number of animal unit months supported by the pasture remains constant.

The average number of animal units moved by each cattle owner is relatively low. Eighty-one per cent of those moving cattle reported that they moved between twenty and two hundred head. In greater detail, twenty per cent moved between twenty and forty-nine head, thirty-four per cent moved fifty to ninety-nine head, and twenty-seven per cent moved between one and two hundred head. The relationship between the number of head moved and the basic herd size is more clearly defined in Table 11 and Fig. 20. As could be expected the percentage of respondents moving large herds is lower than the percentage owning large herds. Conversely, more respondents reported moving herds of less than one-hundred animals than those who owned herds of this size. A slight tendency occurred among the respondents residing in the Municipal district of Pincher Creek to move larger herds. This is not an unexpected observation however, owing to greater average herd size and the emphasis placed on straight ranching.

TABLE 11. SIZE OF HERD MOVED IN RELATION TO BASIC HERD SIZE

NUMBER OF CATTLE	<20	20-49	50-99	100-199	200-500	>500
HERD SIZE OWNED BY PER CENT	3.9*	15.6	28.6	29.9	18.2	3.9
Herd SIZE MOVED BY PER CENT	4.1**	19.9	34.2	27.4	13.0	2.7

* based on data from Questionnaire B.

** based on data from Questionnaire A.

Number Of Respondents In Relation To Number Of Cattle Moved And Basic Herd Size

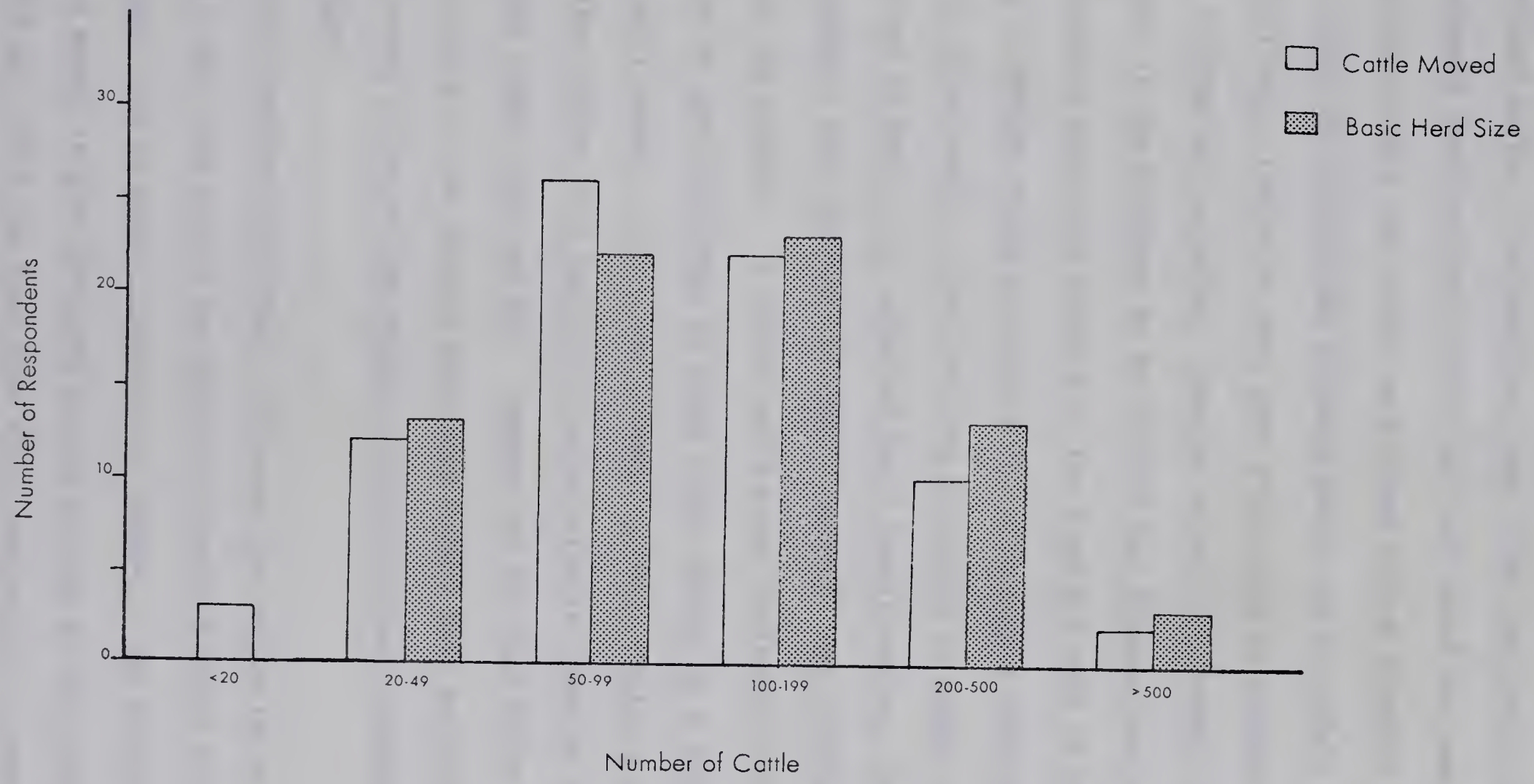


Fig. 20

Practically all of the farmers and ranchers (ninety-one per cent) moved cows and calves. In addition, over fifty per cent of the population also moved yearlings and twelve per cent moved two year olds.

The distance that the cattle were moved seldom exceeded twenty miles. This is close to the maximum distance which can be safely covered in one day of trailing. Trucks or vans were often used to transport the animals if this mileage was exceeded. Whether or not the animals were trailed or hauled, if the distance to be covered was between ten and twenty miles, depended upon such factors as the type and size of herd, whether or not all weather roads and corral facilities were available, and the available labor supply. The trailing of cattle to summer pastures was perceived by some as an occasion for a family outing. When the sons and daughters left the farm or ranch, however, the decision was made to truck the animals. A factor which might indirectly influence the decision of some cattlemen to truck their cattle to a seasonal pasture is the legal aspect. It is now illegal to trail cattle along a public road after sunset thus necessitating a suitable stopping ground if the drive takes longer than one day. Members of the Twin River Grazing Reserve who reside in the Magrath area have solved this problem by stopping at the ranch of one of the members located mid-way between the pasture and Magrath.

Since the Dominion government initiated the regulation of grazing on public land, the policy has been to allocate highest priority of use of Crown land to nearby ranchers or farmers. The distance which animals are moved is also affected by the by-laws of the grazing associations which may limit the area from which membership is drawn. For these reasons herds moved more than twenty miles are destined most

frequently for private land. Among the various users of Crown land, those moving animals to the forest reserve were found to move their animals the furthest.

B. Seasonal Pastures and Systems of Land Tenure

Seasonal pastures may be owned, rented, leased, or held under a permit system. Ownership may be vested with an individual or with the Crown. While some operators use only their own land, other systems are highly complex involving the use of privately owned and operated land, land rented from another individual, and Crown land held under a long term grazing lease by the individual or by a grazing association, as well as forest reserve land. Difficulty arises in determining tenure status as rental agreements between individuals are often informal verbal agreements.

Of the sample population, sixty-four per cent indicated that they used their own land as seasonal pastures. This was complemented in many cases by additional land rented or leased from private or public sources. In the Municipal District of Pincher Creek, thirty-four per cent rented private land while the comparative figure for Cardston was twenty-five per cent. The most popular system of renting was on the basis of a set price per animal unit month or per head per season. The cost of grazing an animal for one month varied between three and one-half and five dollars for private land, depending upon the forage quality and arrangements for the provision of supplies and maintenance. In comparison, the rate per animal unit month for the Twin River Grazing Reserve is three dollars and thirty cents. In the forest reserve the rate is set at one dollar per animal unit month in the Porcupine Hills

and eighty cents throughout the remainder of the area. The second most common type of rental agreement was a system of cash rent in which a specified amount of money was paid per acre on an annual basis. Rental agreements of this nature were often renewed yearly and therefore left the renter in a state of uncertainty. The rent paid for pasture land varied between three and seven dollars per acre, again depending upon the carrying capacity, water supply, fencing, provision of salt, and the relationship between lessor and lessee. Because of the lower rental rates on Crown land held under lease, the demand for such land is greater than the supply and furthermore is greater than that for private land.

Very few rental arrangements were based upon shares or part share and part cash, there being only seven such examples within the population. Similarly, there were only seven cases (4.8 per cent) in which land was held under a family estate and used for seasonal pasture.

Despite the present high values for both rented and purchased land, forty-eight per cent of the population expressed a desire to acquire additional land either by renting or leasing and fifty-six per cent showed an interest in purchasing land for grazing. This was the case given the assumption that the market for beef would remain favorable. A statement commonly made by farmers and ranchers throughout the study area was that there was a scarcity of land to be acquired at any price. Within the Municipal District of Pincher Creek the buying of land for recreational purposes at inflated prices was an especially controversial topic among the cattlemen.

In 1971, the total acreage sold in the Municipal District of Cardston was 30,205 acres while a comparable figure for the Municipal District of Pincher Creek was 34,775 acres. Expressed as a percentage

of the total deeded acreage, this represented respectively a 4.1 per cent and a 6.4 per cent turn over rate. The average price per acre was approximately seventy-eight dollars within the municipality of Cardston and eighty-four dollars within the municipality of Pincher Creek. Compared to the average 1970 values, these prices exhibited an increase of almost fifty per cent (Alberta Department of Agriculture, 1972c). The high price which characterizes land sales appears to result more from a scarcity of both range and crop land rather than from sale of land for recreational purposes. During the late sixties and early seventies, crop land with improvements sold for one-hundred to one-hundred and fifty dollars per acre. Irrigated crop land was considerably more expensive. The minimum price which one might expect to pay for native pasture with a source of water on it, would be approximately seventy dollars per acre. These figures were generally applicable to both districts.

The use of seasonal pastures is an integral part of the beef cattle industry in southwestern Alberta. Summer pastures are an important part of operations which combine crop and livestock production as well as straight cow-feeder calf operations. For the person with a small herd, membership in a community pasture association may supply him with sufficient land for all his summer grazing needs. In the fall the cattle may then be placed in stubble fields to graze until December, weather permitting. The significance of such a policy among mixed farmers may be illustrated by the fact that in one recent year adverse weather conditions delayed the completion of harvest until after the date set for removal of the animals from the Ross Lake Community Pasture. Representation was made by the members to the Lands Division, to permit the animals to remain in the pasture until such time as the crops had been taken from

the fields. Permission was granted.

C. Aspects of Production and the Use of Seasonal Pastures

The decisions made at the level of the individual operator which determine the use of seasonal pastures are influenced by aspects of production unique to each operating unit.

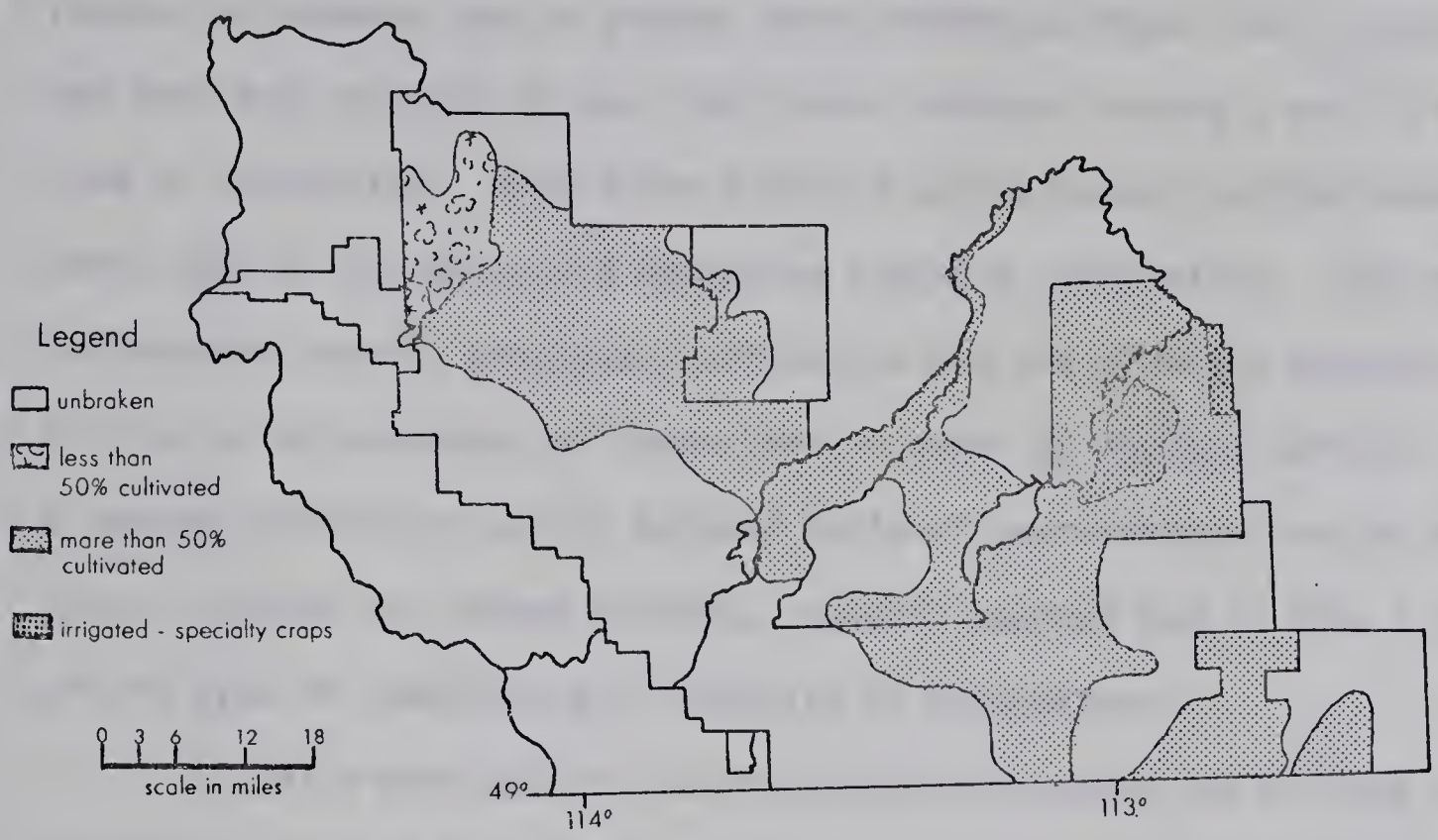
Scale of operation, including acreage owned and herd size, is one of the major determining factors. Particularly, scale of operation acts as a determinant of the patterns of use.

The average acreage owned by all cattle owners differs little from the average acreage of only those who use seasonal pastures. Table 12 summarizes the relationship between acreage owned and use of seasonal pastures. There are, on the other hand, significant variations among the groups who use the various types of pastures held under different types of tenure. Members of a community pasture association or provincial grazing reserve have the lowest average acreage among users of Crown land. It is also lower than the average acreage of all those who move cattle. This fact may be partly explained by the policies regulating membership priority which were discussed in the previous chapter. The lower average acreage may also be attributed in part to the type of operation; most members of community pastures farm their land more intensively than those engaged in a straight ranching operation. They therefore require less acreage to produce the same amount of output. From reference to Fig. 21 and Fig. 22 which give a general indication of the patterns of agricultural land use within the study area, it can be seen that most of the community pastures are located and draw their membership from regions with at least some degree of cultivation.

TABLE 12. ACREAGE OWNED AND USE OF SEASONAL PASTURES

	M.D. of Cardston	M.D. of Pincher Creek
AVERAGE ACREAGE OF ALL CATTLE OWNERS	844	1041
AVERAGE ACREAGE OF THOSE USING SEASONAL PASTURES	856	1160
AVERAGE ACREAGE OF THOSE USING ONLY THEIR OWN LAND	819	927
AVERAGE ACREAGE OF THOSE RENTING PRIVATE LAND	691	906
AVERAGE ACREAGE OF THOSE USING COMMUNITY PASTURES/ PROVINCIAL GRAZING RESERVES	789	985
AVERAGE ACREAGE OF THOSE USING FOREST RESERVE ALLOTMENTS	N/A	1281
AVERAGE ACREAGE OF THOSE HOLDING LONG-TERM GRAZING LEASES	1168	1570

EXTENT OF CULTIVATION IN THE STUDY AREA



Source: Atlas of Alberta (1969)

Fig. 21

AGRICULTURAL LAND USE IN THE STUDY AREA



Source: Atlas of Alberta (1969)

Fig. 22





Within the Municipal District of Pincher Creek, users of forest reserve allotments have a greater than average acreage. While proximity and need are criteria of use, the larger acreage is more a result of type of enterprise. Within the foothill belt adjacent to the forest reserve most of the units are extensive ranching enterprises. The physical environment largely precludes cultivation and the breeding cow must utilize a large acreage of range land in order to sustain herself. While a marked correlation exists between scale of operation and use of the forest reserve for summer grazing, seasonal pasture use is also a product of the type of operation and intensity of production.

While more marked, the relationship between use of long term grazing leases and scale of operation is not so easily explained. The larger acreages of the ranchers or farmers holding such leases may however, be explained partly in terms of stability. The extra acreage granted by a long term lease permits the lessee to effectively increase the acreage operated at a nominal cost. The economic advantage provided in this fashion may enable him to acquire more land of his own. On the other hand, large operators are often in a better position to acquire long term grazing leases than the small operators. Reasons for this are not only economic but may also be political in nature. Fig. 23 shows the distribution of acreages owned by those holding long term leases.

The average acreage owned by persons using only their own land or rented deeded land was less than the average acreage owned by all persons using seasonal pastures. Those renting private land had the lowest acreage of all groups. Use of extra land was therefore necessary in most cases to create an economically viable unit. Persons

Distribution Of Acreages Owned By Holders Of Long Term Leases

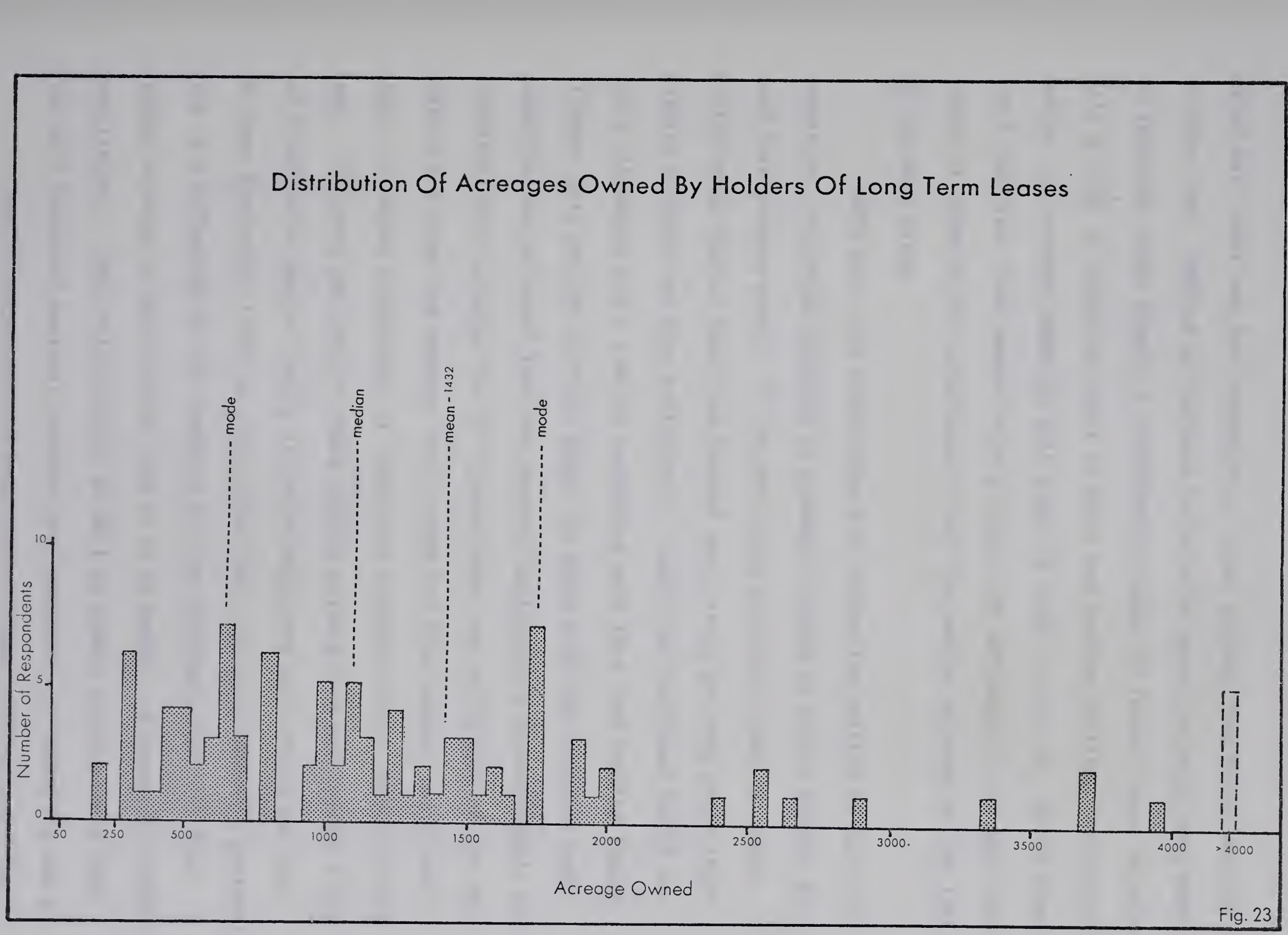


Fig. 23

using only their own land possessed a larger acreage than those renting private land. Because an increase in scale of operation would have meant an increased labor supply, a considerable number of farmers chose to maintain a level of operation equal to their own working ability. The distribution of acreages owned by this group is shown in Fig. 24. While there are a few large land owners in this class, the dominance of the small operator is shown by the occurrence of both the median and mode to the left of the mean value.

Herd size, the second aspect of production related to scale of operation, influenced patterns of movement, though to a less obvious degree than acreage owned. Of the very large operators, that is, those having herds greater than five hundred head, sixty per cent moved their animals to their own land exclusively. Twenty per cent used forest reserve allotments and a similar percentage held long term grazing leases. Although this may not at first appear to agree with the statement made concerning use of owned land for seasonal pastures and acreage owned, the distribution of acreages for this group shows that while most of the operators are below the average level, there are also several large operators. A second observation of importance concerns use of rented private land. Fifty-two per cent of those renting private land had between fifty and ninety-nine head of cattle in their basic herd while forty per cent of those possessing fifty to ninety-nine head also used community pastures. This is a reflection of the tendency for the operators with less than average acreage to rent private land or to be members of community pasture associations. These relationships as well as others linking basic herd size with tenure of seasonal pastures are summarized in Tables 13a and b.

Type of enterprise and intensity of production influence the

Distribution Of Farm/Ranch Size Among Those Using Only Their Own Land

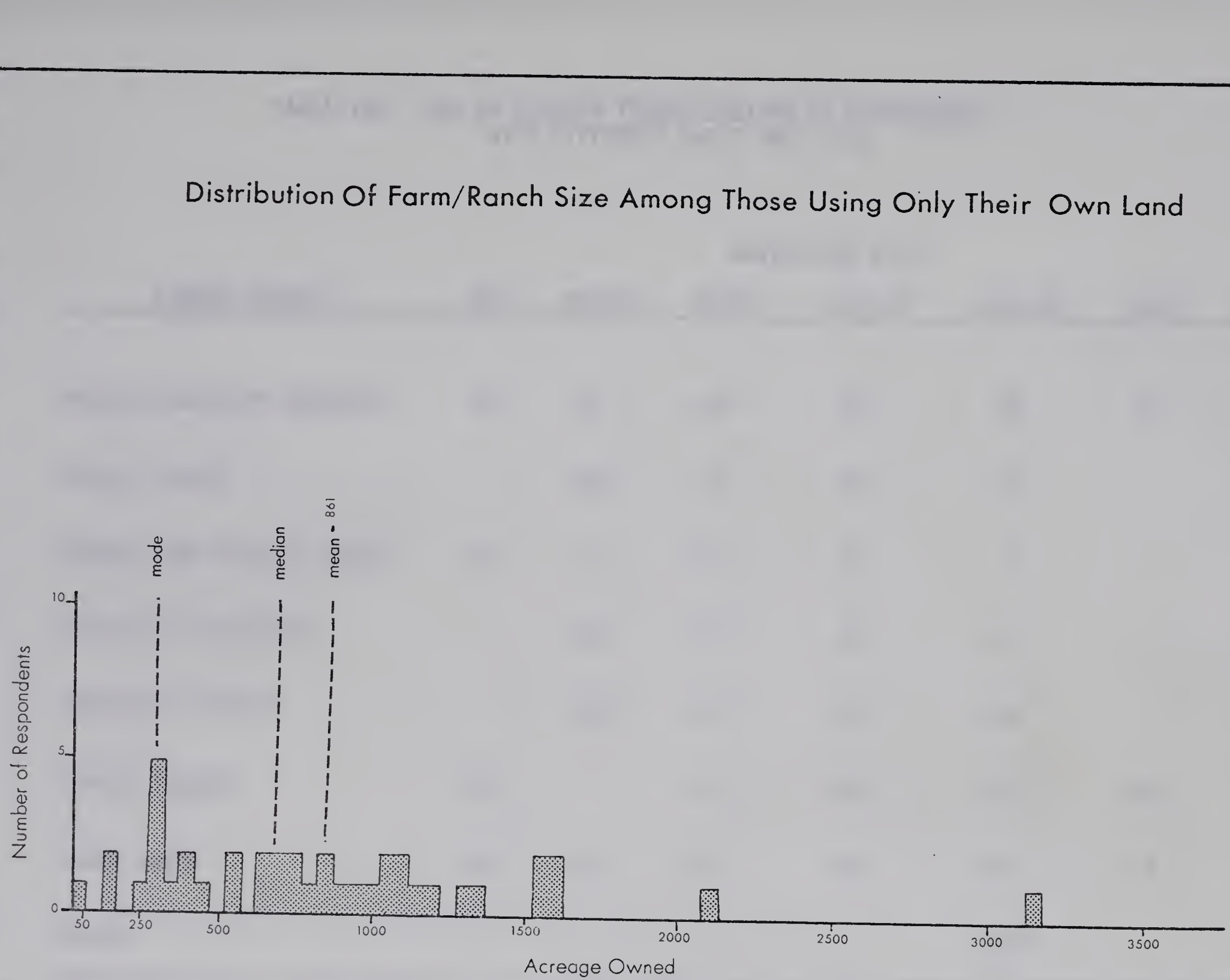


Fig. 24

TABLE 13a. USE OF SIMILAR TENURE SYSTEMS BY RESPONDENTS WITH DIFFERENT BASIC HERD SIZE

TENURE SYSTEM	BASIC HERD SIZE <20	20-49	50-99	100-199	200-500	>500	TOTAL %
PASTURE OWNED BY OPERATOR	4%	12	22	34	22	6	100
FAMILY ESTATE		20%	20	40	20		100
RENTED FROM PRIVATE SOURCE	4%	4	52	35	4		99
GRAZING CO-OPERATIVE		20%	20	20	40		100
COMMUNITY PASTURE		10%	40	25	25		100
FOREST RESERVE	10%		10	40	20	10	100
CROWN LEASE	4%	13	22	30	26	4	99
OTHER					100%		100

Due to rounding to the nearest whole number not all totals equal 100%.

TABLE 13b. USE OF DIFFERENT TENURE SYSTEMS BY RESPONDENTS WITHIN THE SAME BASIC HERD SIZE CATEGORY

	BASIC HERD SIZE					
TENURE SYSTEM	<20	20-49	50-99	100-199	200-500	>500
PASTURE OWNED BY OPERATOR	40%	43	28	39	37	60
FAMILY ESTATE		7%	3	5	3	
RENTED FROM PRIVATE SOURCE	20%	7	31	18	3	
GRAZING CO-OPERATIVE		7%	3	2	7	
COMMUNITY PASTURE		14%	21	11	17	
FOREST RESERVE	20%		3	9	10	20
CROWN LEASE	20%	21	13	16	20	20
OTHER					3%	
TOTAL %	100%	99	102	100	100	100

Due to rounding to the nearest whole number not all totals equal 100%.

patterns of seasonal pasture use as does the scale of operation. This was briefly illustrated in reference to the use of community pastures and forest reserve allotments, and will now be treated in greater detail. The emphasis placed on the cultivation of cereal or oil seed crops as opposed to forage production and the raising of livestock varies according to the topography, climate, and soils. Fig. 8 outlining agro-climatic areas in southern Alberta as well as Fig. 21 and Fig. 22 showing agricultural land use provide evidence of this. Individual preference operates within these confines, however, to yield the final pattern.

As might be expected native grass land pastures were the dominant type of seasonal pasture, regardless of the system of land tenure under which they were held. Except for a very small acreage of improved pasture, all of the Crown land used for grazing is native range. This is also the case with deeded land within the foothill belt, though recently a greater emphasis has been placed on the production of tame hay. By a series of cross-tabulations it was determined that almost three-quarters of those using forest reserve allotments also used native pastures while only nineteen per cent of this same group used some tame pasture and six per cent made use of stubble for fall grazing. In comparison, figures for community pasture members were respectively sixty-seven per cent, fourteen per cent, and ten per cent. Ten per cent of community pasture patrons used improved pasture land as well. The greater emphasis placed on the use of stubble results from the difference in the location and related agricultural potential of the operating units comprising these two groups. The relationships between pasture type and tenure system are summarized in Tables 14a and b. The greater occurrence of tame and improved pasture within the category of privately owned and operated land

TABLE 14a. USE OF A TENURE SYSTEM BY RESPONDENTS WITH DIFFERENT TYPES OF SEASONAL PASTURE LAND

TENURE SYSTEM	TYPE OF PASTURE						
	NATIVE	IMPROVED	TAME	SPRING GRAIN	STUBBLE	OTHER	TOTAL %
PASTURE OWNED BY OPERATOR	57%	13	21	0.7	7	1	101
FAMILY ESTATE	50%	10	30		10		100
RENTED FROM PRIVATE SOURCE	61%	7	18	3.0	9	1	99
GRAZING CO-OPERATIVE	68%	5	18		9		100
COMMUNITY PASTURE	67%	10	14		10		101
FOREST RESERVE	74%		19		6		99
CROWN LEASE	60%	6	21		11	2	100
OTHER	75%		25				100

Due to rounding to the nearest whole number not all totals equal 100%.

TABLE 14b. USE OF DIFFERENT TENURE SYSTEMS AMONG RESPONDENTS USING THE SAME TYPE OF PASTURE

TENURE SYSTEM	TYPE OF PASTURE					
	NATIVE	IMPROVED	TAME	SPRING GRAIN	STUBBLE	OTHER
PASTURE OWNED BY OPERATOR	36%	56	42	33	34	50
FAMILY ESTATE	2%	3	4		3	
RENTED FROM PRIVATE SOURCE	18%	15	16	67	19	25
GRAZING CO-OPERATIVE	6%	3	5		6	
COMMUNITY PASTURE	14%	15	9		16	
FOREST RESERVE	10%		8		6	
CROWN LEASE	12%	9	14		16	25
OTHER	1%		1			
TOTAL %	99%	101	99	100	100	100

Due to rounding to the nearest whole number not all totals equal 100%.

is reasonable as the average individual will invest in improvements only with the assurance of benefitting from the additional labor and capital inputs required to raise the intensity of production.

The livestock enterprise, as reflected by the ages and types of animals moved, the use of feedlots, and winter feeding, has a bearing on the use of seasonal pastures. Generally, the most frequent pattern involved the movement of cows with calves to privately owned and operated native range land. As alluded to previously, very few ranchers still run two year old steers. The movement of yearling steers and heifers was important,however, throughout the study area. Tables 15a and b, and 16a and b give evidence supporting these generalizations.

Cows with calves were moved to native pastures sixty-three per cent of the time. This percentage was only slightly higher than that for yearlings and two year olds. Similarly, cows with calves were turned out on stubble to graze in the fall more often than yearlings or two year olds in terms of both absolute and relative figures. This difference was again of a minor nature and may be partially accounted for by marketing procedures and the use of feedlots. With the return of the animals from their summer pasture in the fall, the operator has several alternative courses of action. He may sell his spring calves, yearlings, and/or two year olds immediately, he may put them into a feedlot, or he may turn them into stubble fields or into another pasture to graze. The greater relative use of stubble by cows would appear to indicate that the yearlings or two year olds are as a rule either sold or placed in a feedlot.

In examining the relationships between herd type moved and the systems of tenure, a similarity was noticed between the relative percentages of types of cattle moved to land held under the various tenure sys-

TABLE 15a. USE OF SIMILAR PASTURE TYPES AMONG RESPONDENTS MOVING DIFFERENT CATEGORIES OF CATTLE

	TYPE OF CATTLE				
PASTURE TYPE	COWS/CALVES	YEARLINGS	2 YEAR OLDS	OTHERS	TOTAL %
NATIVE	58%	32	8	2	100
IMPROVED	47%	42	7	5	101
TAME	58%	32	10		100
SPRING GRAIN	40%	20	20	20	100
STUBBLE	64%	32	5		101
OTHER	50%	25	25		100

Due to rounding to the nearest whole number not all totals equal 100%.

TABLE 15b. USE OF DIFFERENT PASTURE TYPES AMONG RESPONDENTS MOVING THE SAME CATEGORY OF CATTLE

	TYPE OF CATTLE			
PASTURE TYPE	COWS/CALVES	YEARLINGS	2 YEAR OLDS	OTHERS
NATIVE	63%	59	59	57
IMPROVED	10%	16	10	29
TAME	18%	17	21	
SPRING GRAIN	1%	1	3	14
STUBBLE	7%	6	3	
OTHER	1%	1	3	
TOTAL %	101%	100	99	100

Due to rounding to the nearest whole number not all totals equal 100%.

TABLE 16a. USE OF SIMILAR TENURE SYSTEMS BY RESPONDENTS MOVING DIFFERENT CATEGORIES OF CATTLE

TENURE SYSTEM	TYPE OF CATTLE				
	COWS/CALVES	YEARLINGS	2 YEAR OLDS	OTHERS	TOTAL %
PASTURE OWNED BY OPERATOR	57%	34	8	1	100
FAMILY ESTATE	78%	22			100
RENTED FROM PRIVATE SOURCE	65%	23	8	3	99
GRAZING CO-OPERATIVE	45%	45	10		100
COMMUNITY PASTURE	57%	35	6	2	100
FOREST RESERVE	53%	40	8		101
CROWN LEASE	52%	36	11	2	101
OTHER	40%	40	20		100

Due to rounding to the nearest whole number not all totals equal 100%.

TABLE 16b. USE OF DIFFERENT TENURE SYSTEMS AMONG RESPONDENTS MOVING THE SAME CATEGORY OF CATTLE

TENURE SYSTEM	TYPE OF CATTLE			
	COWS/CALVES	YEARLINGS	2 YEAR OLDS	OTHER
PASTURE OWNED BY OPERATOR	38%	37	38	20
FAMILY ESTATE	3%	1		
RENTED FROM PRIVATE SOURCE	17%	12	15	40
GRAZING CO-OPERATIVE	6%	9	9	
COMMUNITY PASTURE	12%	12	9	20
FOREST RESERVE	9%	12	9	
CROWN LEASE	13%	14	18	20
OTHER	1%	1	3	
TOTAL %	99%	98	101	100

Due to rounding to the nearest whole number not all totals equal 100%.

tems. The greatest difference occurring was five per cent, this being between rented deeded land and long term Crown grazing leases. Overall, there appears to be little preference displayed for different systems of tenure with respect to the different categories of cattle. While most of the community pastures, grazing reserves, and forest reserve allotments are open to all types and ages of animals, a few exceptions do occur within the allotments.

Within recent years the presence of private and commercial feedlots in southwestern Alberta has become more prevalent. Forty per cent of those using seasonal pastures now also operate a feedlot. Half of this group purchases additional feeders. If additional feed was required, few instances occurred in which it was obtained from outside the district. During years of extreme feed shortage throughout the entire region, financial assistance has been granted to the ranchers and farmers by the Provincial government.

Among the population studied, the operation of feedlots was correlated with number of cattle moved. Generally, those who moved a large number of cattle were more likely to operate a feedlot. This relationship is graphically shown in Fig. 25. Sixty-one per cent of the population maintained between twenty and two hundred head of feeders, with the smaller feedlot operation occurring most often. Cattlemen who moved between twenty and fifty head and between one hundred and two hundred head were most likely to buy additional feeders. It was found that while more than half of those who moved yearlings operated a feedlot, only thirty-seven per cent of those moving cows with calves did so. These relationships are summarized in Tables 17a and b. Further, those who moved yearlings were more likely to purchase additional feeders and to operate

Feedlot Operation In Relation To Number Of Cattle Moved

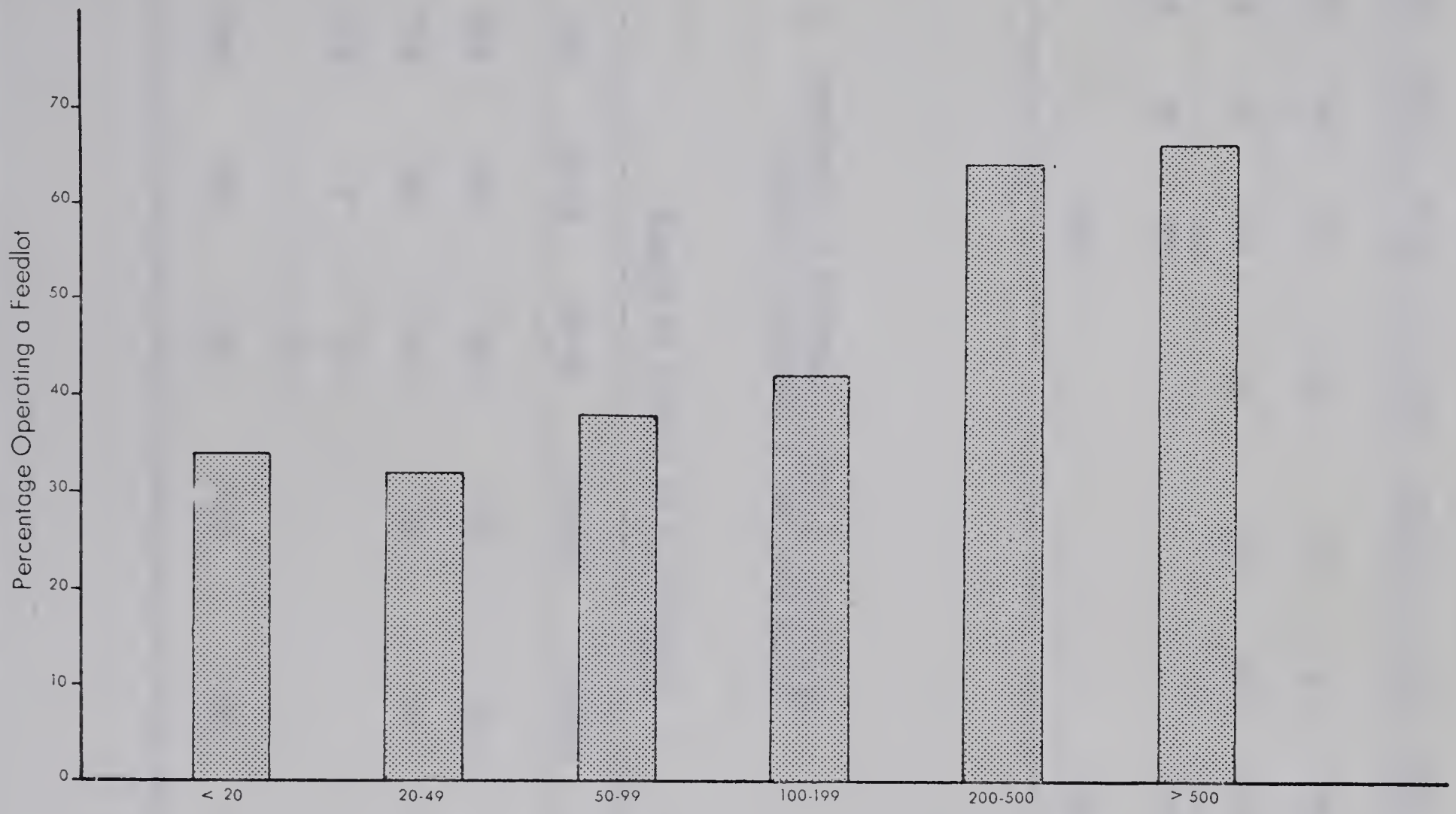


Fig. 25

TABLE 17a. TYPE OF CATTLE MOVED BY FEEDLOT OPERATORS OF VARYING SCALE

	NUMBER OF CATTLE IN THE FEEDLOT						
TYPE MOVED	<20	20-49	50-99	100-199	200-500	>500	TOTAL %
COWS/CALVES	16%	24	20	20	12	8	100
YEARLINGS	10%	20	15	15	20	20	100
2 YEAR OLDS	50%	25	25				100
OTHERS			100				100

TABLE 17b. MOVEMENT OF DIFFERENT TYPES OF CATTLE BY FEEDLOT OPERATORS OF THE SAME SCALE

	NUMBER OF CATTLE IN THE FEEDLOT					
TYPE MOVED	<20	20-49	50-99	100-199	200-500	>500
COWS/CALVES	50%	55	50	63	43	33
YEARLINGS	25%	36	30	37	57	67
2 YEAR OLDS	25%	9	10			
OTHERS			10			
TOTAL %	100%	100	100	100	100	100

larger feedlots. This same group was also found to most often require additional feed beyond what they produced themselves.

D. Case Studies

The characteristics and relationships discussed in a general sense will be illustrated in this section by briefly describing the operations of three farms or ranches which differ not only in their use of seasonal pastures but also in related aspects of the production of beef cattle and in land use.

Farm A, a mixed dryland farm combining cereal crop production and beef cattle production, is situated several miles east of the town of Cardston. Of the 600 acres which are owned by Farmer A, approximately one-half is used for the production of cereal grains, while the other half is tame hay or native pasture. One-quarter section of tame hay land is isolated from the main farmstead by a distance of about ten miles. This land is situated on the eastern margin of the foothills and is used in conjunction with another quarter section of rented improved native pasture which is partly irrigated. The land is rented on a cash basis for five months from the parents of Farmer A. Membership within the Ross Lake Community Pasture Association has allowed Farmer A to use his own land to better advantage. The location of the land operated by Farmer A is shown by Fig. 26. Also designated in this illustration is the pattern of land use.

The seasonal cycle begins with the movement of thirty cows with calves and a clean-up bull to the Ross Lake Community Pasture. While the cattle were originally trailed the twenty-seven miles to the pasture, they are now trucked. This takes much less time and is not so fatiguing.

Farm A- Location And Land Use



Fig. 26



In recent years entry into the pasture has been deferred until after the cows have been bred. Farmer A is using a program of artificial insemination to introduce Simmental characteristics into his herd and to increase the rate of gain of his calves. Only the better cows are serviced in this manner, however, and a Hereford bull is used for the heifers and other cows. A member of the association for ten years, Farmer A is well satisfied with the management of the pasture.

With the close of the grazing season in mid-October, the cattle are brought to the farmstead. The cows are turned onto stubble to graze while most of the calves are sold immediately at local auction markets. The heifers sired by Simmental bulls are kept as replacements and the younger members of the family each keep a steer for the 4-H calf club. The cows are pregnancy tested in the fall and any which will not have a calf in the spring are sold. These are replaced with bred heifers.

The cows in top condition are moved to the land located west of the farmstead for the winter. They are given barley straw to supplement the tame hay which they obtain from grazing and just prior to calving a small amount of grain is added to their diet. The poorer quality or sickly animals are maintained at the farmstead over winter where they can be watched more closely.

In the spring, the cows are moved from the tame hay land to the rented native pasture. These two parcels of land are separated by less than a mile. Farmer A has indicated an interest in acquiring the use of this intervening land if such was to become available. The cycle is now completed and the cattle will next be moved to the community pasture.

Ranch B is located in the foothills near the village of Mountain View within the Municipal District of Cardston. Fig. 27 indicates the

Ranch B- Location And Land Use

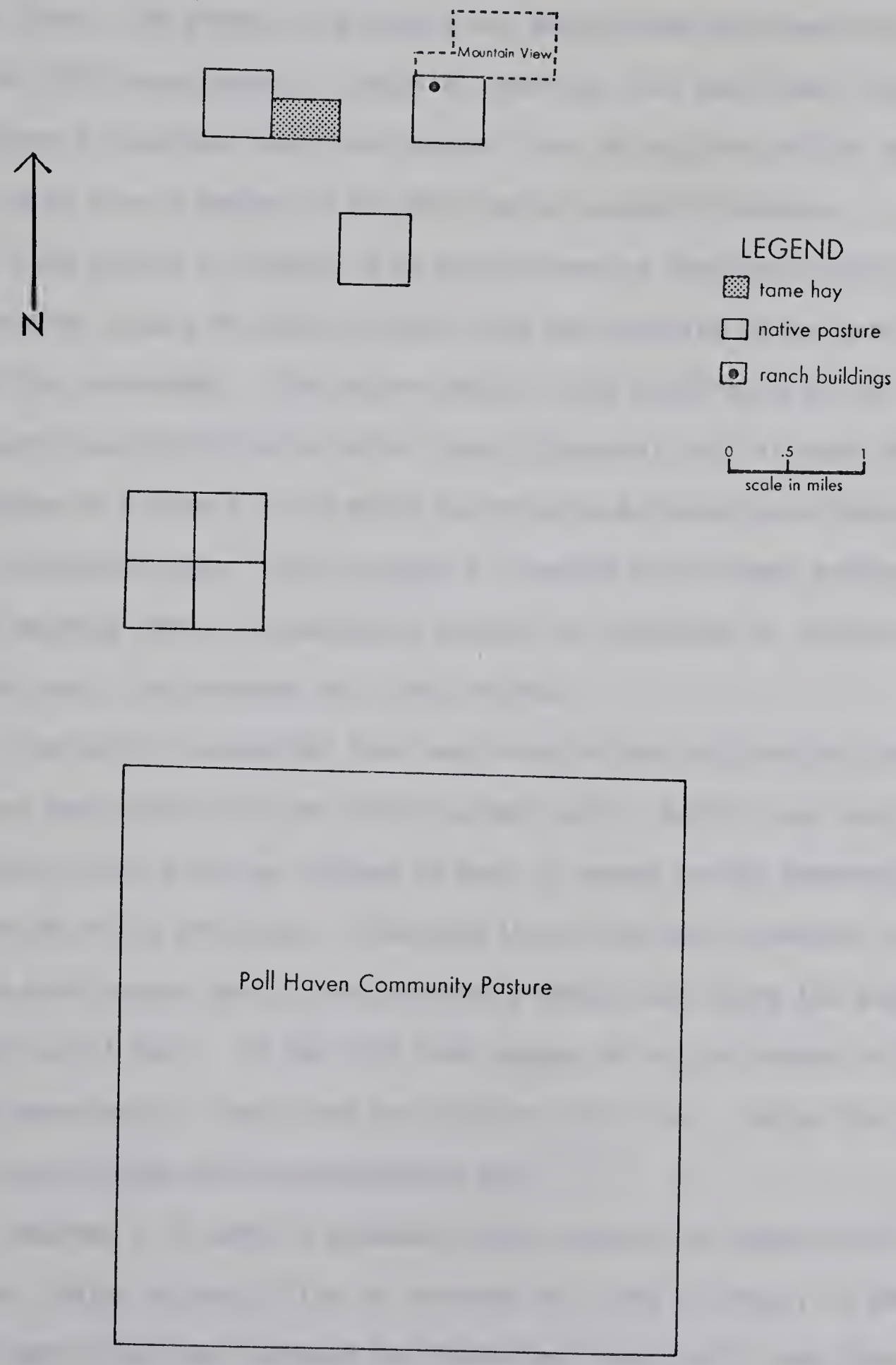


Fig. 27



relative location of the ranch property and the Poll Haven Community Pasture. Rancher B operates a straight cattle ranch enterprise. He owns and operates 1,125 acres of which all but eighty acres are native grass and brush land. The eighty acre parcel has been broken and seeded to a mixture of alfalfa and brome. Though he does not rent additional pasture land, Rancher B receives about one hundred tons of hay from baling on shares. He is also a member of the Poll Haven Community Pasture.

Like Farmer A, Rancher B is cross breeding Herefords and Simmentals. Breeding occurs in July at which time the cows are in an open pasture near the ranchstead. The better quality cows which have had at least one calf are bred artificially while a part Simmental bull is used for the remainder of the herd. The extra weight gain achieved more than offsets any increased costs. March calves will weigh up to eight hundred pounds at weaning time. A comparable weight for Herefords or Angus would be, at the best, five hundred and fifty pounds.

The herd is separated into two groups after the breeding season. The smaller group consisting of thirty animal units, mainly cows over twelve years of age and cows without calves, is moved to the community pasture on the first of August. The majority of the herd, however, is moved to a more brushy part of the privately owned land where the animals will remain until fall. In the fall both groups of cattle return to the more open grasslands. The calves are sold at this time. During the winter, the cows are supplied with supplementary hay.

Rancher B is totally dependent upon the sale of range cattle for his income. While he would like to increase his land holdings, he realizes that more likely an increase in production levels will come from an increased emphasis upon the use of tame hay and pasture improvement.

Though he values the use of the Poll Haven Community Pasture, he is not dependent upon it for the success of his operation. Unfortunately this is not the case with all the members of the association.

Ranch C is located northwest of Lundbreck in the Municipal District of Pincher Creek. The scale of operation of this enterprise is the largest of the three case studies, and also the most complex. The acreage operated includes 5,000 acres of native range land part of which is rented, between 200 and 300 acres of tame hay or pasture, 800 acres of forage crop land, and 900 acres of land sown to cereal crops. In addition to the deeded land, Rancher C owns shares in the Waldron Grazing Co-operative, and has a preference in the Gap and the Rock-Conelly Allotments of the Crowsnest Forest Reserve. A long term Crown grazing lease is held on land adjoining ranch property. The spatial distribution of the owned acreage is shown in Fig. 28 along with the relative location of the Waldron Grazing Co-operative, the forest reserve allotments, and the land held under a long-term grazing lease. Unfortunately the legal description of the private rented land is not known.

The general policy regarding the use of private land as seasonal pasture is to use the land located the greatest distance from the ranchstead during the spring and summer and to gradually move the animals closer to home with the passing of the seasons. By the time that winter arrives all the animals are in close proximity to the buildings. The cows are kept together as one herd during the winter and the yearlings are all placed in a feedlot. Rancher C has a basic reproductive herd of three-hundred and fifty head.

In the spring the cow herd is divided into several groups and sent to various pastures. The first group, consisting of one hundred

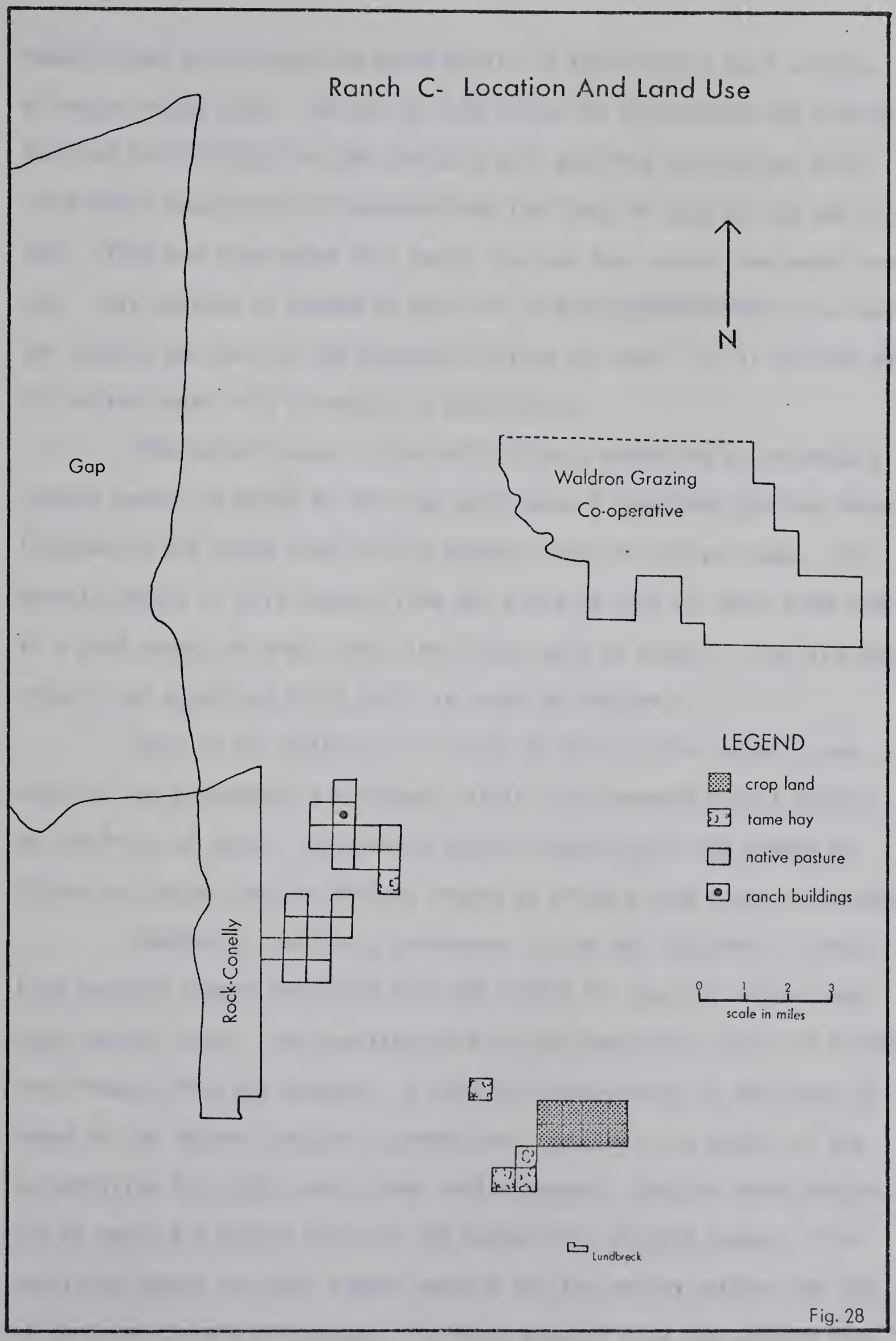

Ranch C- Location And Land Use
N
Gap
Waldron Grazing
Co-operative
Rock-Conelly
LEGEND
crop land
tame hay
native pasture
ranch buildings
0 1 2 3
scale in miles
Lundbreck

Fig. 28



head of cows with calves and three bulls, is trailed to a half section of native range land. The use of this parcel is acquired at the cost of four and one half dollars per cow-calf unit and five dollars per bull. The animals remain in this pasture from the first of June to the end of July. They are then moved to a nearby pasture for another two month period. This pasture is rented at the rate of five hundred dollars per quarter section per year or one thousand dollars per year. It is of good quality native grass with a minimum of brush cover.

The second group of cows with calves, numbering approximately seventy head, are moved to the land held under a long term grazing lease. Included in the lease area is five hundred acres of native range. The animals remain in this pasture from the first of July by which time there is a good growth of grass until the latter part of August. They are then moved to an adjoining field which is owned by Rancher C.

Most of the heifers, or a group of thirty-five animals, are moved to the Rock-Conelly Allotment within the Crowsnest Forest Reserve on the first of June. The grazing season extends until the middle of October at which time the heifers return to private land nearer the ranch.

Rancher C also has a preference in the Gap Allotment. Forty-five yearling steers are moved here the middle of June and return home three months later. The yearlings are placed immediately into the feedlot upon removal from the reserve. A slightly larger group of yearlings is moved to the Waldron Grazing Co-operative. Rancher C, a member of the co-operative for eight years, owns twelve shares. Each of these enables him to graze 4.4 animal units in the pasture per grazing season. The yearlings remain in their summer pasture for the period between the end of June and the end of October. On their removal from the pasture they

are placed in a feedlot along with the other yearlings.

Rancher C feeds out three hundred head of his own plus an additional one hundred head purchased at local livestock auctions. From his cropland he is able to produce sufficient feed to meet the winter feeding requirements.

From the three examples just discussed the degree of variation which occurs between individual units is evident. A complete understanding of all the reasons underlying the decisions made regarding the use of seasonal pastures is for this reason rather difficult. However, before any valid generalizations can be derived, the individual operating unit must be studied and comprehended.

E. Summary

The pattern of seasonal cattle movements in southwestern Alberta is largely one of movement away from the ranch or farmstead during the spring and back to a central location during the winter. This cycle not only facilitates winter feeding, but also enables the cattleman to utilize land unsuited for use other than as summer range land, while fields situated in a more favorable physical environment are intensively cropped. Crown land, used for grazing, is located within regions of rough topography or where rainfall is most suited to summer grazing. Deeded land used for summer grazing is similarly located in the majority of cases.

Most of the movements are local in nature with less than one-fifth of the herds travelling more than twenty miles between pastures. The changes in vegetation, climate, and topography as well as land use are, however, often dramatic in even this relatively short distance. Private pastures are more often located a greater distance from the ranch or farmstead than Crown grazing land. This results from the priority

given to nearby farmers and ranchers by the Alberta Department of Lands and Forests.

Most of those moving cattle, move cows with calves; in addition, half of the population also moves yearling steers or heifers. This trend reflects the dominant cow-feeder calf enterprise in the study area. It is the cow-calf unit which is best able to take advantage of the native range lands which provide by far the greatest proportion of summer grazing.

While sixty-four per cent of the population who moved cattle used their own land as seasonal pasture, only twenty-eight per cent used their own land exclusively. Between twenty and thirty per cent also used other sources of deeded land, community pastures, and long-term Crown grazing leases. The use of the Crowsnest Forest Reserve was equally significant among cattlemen residing within the Municipal District of Pincher Creek.

Among those operators who used additional land, either private or Crown, the most popular arrangement for payment was based on a specified sum per animal unit month. Of secondary importance was a straight cash rental system whereby the tenant paid a specified sum per acre per year. Crown land, under either system, is considerably less expensive than private land. While a few ranchers or farmers, mainly large operators and those raising pure bred stock, prefer not to use public pastures, there is generally a strong demand for Crown grazing land. The availability of public grazing land is particularly of value to the young person who has just entered into the business of farming or ranching and most of the community pastures have a waiting list composed largely of such individuals.

Despite the demand for public grazing land, future indications

are towards a decrease in supply, particularly in the eastern slopes of the Rocky Mountains. Timber encroachment, and pressures from recreation, wildlife, watershed maintenance, and industry will all contribute to a reduction in the use of the foothills for grazing by domestic livestock. The farmers and ranchers are already aware of such a trend, and have recognized, to a degree, the need for increased production on private land. A greater emphasis has been placed on the production of tame hay in the past several years, and experimental plantings of new forage varieties have been carried out by the more progressive farmers and ranchers.

Increased use of feedlots also indicates a change in methods of operation. By reserving the range lands for cows and calves, the same number of animals can be raised to market stage on less land in a shorter period of time. In addition to the private feedlot operated by an individual, commercial feedlots are becoming more numerous. In this manner, ranchers who do not have crop land can also place their calves and/or yearlings into a feedlot and increase their income. Most of the young feeder calves, sold in the fall at local auction markets, are bought by farmers who produce a surplus of feed grain, especially barley, and straw which often are more marketable in the form of beef. A major market for calves is also supplied by farmers in the irrigation districts east and south of Lethbridge who are better able to produce large quantities of hay than the dry landers. By-products of the sugar refining process such as beet pulp and molasses, are also fed to cattle.

Increased rates of gain have resulted not only from feedlot finishing but also cross-breeding of the typical Hereford or Angus cow with exotic beef breeds. Most popular within southwestern Alberta are Charolais and Simmental. Artificial insemination programs make it feasible

for even the small operator to increase production efficiency in his herd by cross-breeding. While the use of seasonal pastures remains as an important aspect of the beef cattle industry in southwestern Alberta, the degree of reliance placed upon such pastures has been reduced by a transformation in the methods and intensity of production. The high demand for pasture land generally, however, indicates that in the future the beef cattle industry must make even greater changes if it is to expand.

CONCLUSION

The movement of range cattle to seasonal pastures has been a traditional practice among cattlemen of southwestern Alberta. Patterns of migration were conditioned, prior to 1881, largely by the biophysical nature of the landscape. Cattle were free at that time to roam the range in search of grass, water, and shelter and it was not uncommon to find cattle grazing in the foothills and adjacent lower slopes of the Rocky Mountains during the summer. As time passed and the beef cattle industry underwent a transformation in response to increased agricultural settlement, governmental policies controlling the use of public lands for grazing, market conditions, and improved transportation and technology, the early patterns of movement also changed. The appearance of the barbed wire fence on the open range of southwestern Alberta was instrumental in necessitating the regulation of seasonal movements. By 1905 settlement was almost complete and the Lethbridge district was completely fenced within twenty-five miles of the city (MacInnes, 1930; 247).

Though the mountains and foothills had offered summer grazing to range cattle since they were first introduced to the area, no attempt was made to control such use until 1910. The Porcupine Hills were most affected as the density of settlement and cattle was greatest immediately adjacent to the hills. Cattle remained in the Forest Reserve for six or more months and under special conditions winter grazing was also permitted. The grazing season was not shortened to any extent until the early 1950's.

The second area to be regulated for public grazing was set

aside in 1935. This block of land, 1-19-W4, had experienced conditions of drought for several preceding years and in order to assist nearby farmers and ranchers, one township was set aside for public grazing. In 1942 the pasture attained the status of a Provincial Grazing Reserve. Though winter grazing was allowed at the start because of the prevailing drought this pasture has since served only as a summer pasture.

During the early 1940's several community pastures were organized within the study area according to regulations established by an Order-in-Council in 1942. These all had the characteristic of being located in areas not suited to cultivation. Seven such pastures are now in operation and provide summer grazing land.

In addition to the public pastures used by a group of people, individual long-term grazing leases are assigned by the Alberta Department of Lands and Forests. The use of these Crown parcels for grazing is regulated in a fashion similar to that of community pastures, as spelled out in the "Public Lands Act".

Movement of cattle to publicly-owned pastures often constitutes a modified form of transhumance, if the definition of transhumance is taken to be the periodic movement of domestic animals between two regions, of different climate and often altitude, one of which is regarded as a permanent home. This may or may not be the case, however, with reference to privately owned pastures. While there are numerous instances in which a farmer on the plains also owns pasture land in the foothills to which he moves his cattle for the summer period, it is becoming more common for adjacent pastures to be used during certain periods of the year. The difference in climate is not applicable in such cases and it would

perhaps be better to designate such a phenomenon as rotational grazing.

Within the study area native range comprises most summer pastures, while tame grass or cereal grains are more adaptable to early spring or fall grazing. Relative to the acreage available for summer grazing there is a scarcity of winter pasture. This fact has necessitated the provision of extra feed for the winter period. Thus it can be stated that transhumance is compatible with cultivation in southwestern Alberta.

Under existing conditions, the range and pasture lands cannot support a major expansion in the beef cattle industry. Some accomodation must soon be made within the industry to account for the imminent loss of Crown land within the foothills and mountains to alternate uses, particularly water-shed maintenance, wildlife habitat, recreation, and industry. The probable solution will likely be increased productivity on privately-owned land and a greater emphasis on use of pasture in conjunction with crop land. Rotational grazing is predicted to assume greater importance among cattlemen. Feedlot operations will continue to expand in number and scale. More efficient methods of storing and feeding large quantities of feed must receive study if feedlots are to reach the optimum level of production efficiency. By combining a greater use of improved pasture and forage crops with better methods of handling, storing, and feeding it will be possible to increase the total feed supply. Incorporation of high gaining exotic beef breeds such as Simmental and Charolais, with the basic beef breeds of Hereford, Angus, and Shorthorn will further increase the amount of beef produced. Though the patterns of seasonal pasture use can be expected to change, with fewer

cattle being sent to Crown land in the forested areas particularly, there is little doubt that this traditional practice will remain for the next twenty years at least.

The original objectives of research, to determine the extent and characteristics of seasonal pasture use as they relate to the beef cattle industry, have been discussed to this point only in terms of the study area. By and large, however, the observations made can be applied to all of southwestern Alberta. While the same regulations and policies of land settlement applied to the entire province, the implications of these were most strongly felt in the southwest where cattle ranching first developed. Here, the tradition of seasonal cattle movement is most firmly rooted and owing to the physical environment, and historic circumstance will likely remain the longest.

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APPENDIX I

QUESTIONNAIRES AND COVER LETTERS

The spacing of the questionnaires has been changed to conform with thesis format regulations.

June 21, 1972

Dear Sir (Madam):

I am interested in determining the linkages between land tenure and the seasonal movement of livestock, particularly cattle, in the foothills region of southwestern Alberta. The study area includes the Municipal Districts of Pincher Creek and Cardston and the area of the province west of that region, excluding Waterton Lakes National Park. In order to further my research on this topic, a short questionnaire, such as the one enclosed, is being sent to approximately 600 property owners who also possess cattle brands. It is expected that the responses received will enable the development of a broader perspective on the subject than what will be obtained through personal interviews with 50 farmers and ranchers during July and August.

As one of the cattle owners selected, information regarding your use of seasonal pastures and the movement of cattle to them will be most useful. It is hoped that results from this study can be used as a partial basis for recommendations resulting in improved pasture facilities for the beef cattle industry in the foothills region. Being from a farm myself, I realize that you are undoubtedly very busy. Nevertheless, I hope that you will be able to spare a few moments required to complete the survey enclosed. A business reply envelope is provided for its return. Statistically sound results depend upon a high completion rate.

This study is being conducted as part of the requirements for a Masters Degree from the University of Alberta. A copy of a letter from my University Supervisor is enclosed as a credential. I have also received permission from the District Agriculturist at Cardston, Mr. Steed, to use his name as a reference.

Thank-you for your consideration and assistance.

Yours sincerely,

Miss Esther Kienholz, Graduate Student
Department of Geography
University of Alberta
Edmonton, Alberta
T6G 2H4

TO WHOM IT MAY CONCERN

Miss Esther Kienholz is a graduate student doing research for her Masters Degree in the Department of Geography, University of Alberta. The topic of her thesis is:

The Linkages Between Seasonal Stock Movements and Land Tenure in Southwestern Alberta.

I would appreciate it if you would extend to her any assistance that is possible to enable her to carry out her research.

Many thanks,

Dr. R.G. Ironside
Associate Professor
Department of Geography
University of Alberta

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_____

THE LINKAGES BETWEEN SEASONAL STOCK MOVEMENTS AND LAND TENURE IN SOUTHWESTERN ALBERTA - QUESTIONNAIRE

The following questions are designed to provide information on the extent of seasonal movements of cattle in southwestern Alberta and the systems of land tenure under which the pastures thus utilized are held and operated.

Your reply will be held completely confidential. While your identity will be known to me during the early part of the study, your privacy will be respected. The results of the research will be reported in such a manner so as to provide a collective profile for each Census Subdivision studied.

Please circle the appropriate answer(s) or answer the question in the space provided. There may be some questions which require more than one answer; if this is the case, circle all the appropriate answers. Space for comments is provided at the end of the questionnaire.

****

1. Do you move cattle to a seasonal pasture?
   a yes
   b no

   If the answer to question 1 is no, answer only questions 2 and 3; if the answer is yes, answer all questions except 2 and 3.

2. Did you used to move cattle or any other type of livestock?
   a yes (specify type, location, years)_____
   _____
   b no

3. Briefly, what are the main reasons behind your decision to discontinue this practise and are there any circumstances under which you would resume the seasonal movement of livestock?

   _____
   _____
   _____
   _____
   _____
   _____

4. Under what system of land tenure is (are) your seasonal pastures held?
   a deeded land owned by yourself
   b land held under a family estate
   c land rented or leased from another private individual
   d land rented or leased from a private company
   e a grazing co-operative owned by a group of cattle owners
   f a community pasture (Crown land)
   g forest reserve allotment
   h other Crown land
   i other(specify)_____

5. At present, if you do not already use community pastures or other similar grazing reserves, would you be willing and able to use them?
   a yes
   b no

6. Would you be interested, given that present market conditions remain stable, in acquiring additional pasture land through renting or leasing from another individual?
   a yes
   b no

   through pruchasing land from another individual?
   a yes
   b no

   If you are interested in either method, what are some of the characteristics of the land that would influence your decision?

   _____
   _____
   _____

7. If you either rent or lease land from one or more sources, could you please briefly describe the renting or leasing arrangements?

   _____
   _____
   _____

8. Is (are) the seasonal pasture(s) that you use
   a native pasture
   b improved native pasture
   c tame hay
   d early spring grain crops (fall rye,
   e crop residue
   f other (specify)_____

9. When do you move your animals generally? (specify dates)
   a spring_____
   b summer_____
   c fall_____
   d winter_____

10. Approximately, how many animals do you move?
   a fewer than 20
   b 20 to 49
   c 50 to 99
   d 100 to 199
   e 200 to 500
   f greater than 500

11. Are your animals of different ages segregated in different pastures?
   a yes
   b no

12. What type of animals do you move?
   a cows and calves
   b yearling steers and/or heifers
   c two year olds
   d other (specify) _____

13. What is the average distance that you move your animals? If you separate your animals in different pastures circle the average distance for each.
   a less than 2 miles
   b 2 to 5 miles
   c 6 to 10 miles
   d 11 to 20 miles
   e greater than 20 miles

14. By what means are they moved?
   a trailed
   b trucked
   c other (specify)_____

15. Would you be interested in participating further in this study through a personal interview conducted during July or August at a time convenient for you?
   a yes
   b no

****

Comments:

December 11, 1972

Dear Sir(Madam):

During last June you received a survey in the mail concerning the linkages between the movement of cattle to seasonal pastures and land tenure in Southwestern Alberta. I would like to thank you for your consideration in returning the questionnaire and your assistance in my research.

Preliminary analysis of the data obtained from the questionnaires indicates a general idea of the extent of the movement of cattle and the most commonly used systems of land tenure. A summary report is enclosed. However, after my summer's research it has become apparent that in order to establish why movement occurs and the relationships between land tenure and seasonal movements, more specific data is required. It is for this reason that I find it necessary to send out a supplementary questionnaire. I would be most grateful if you would complete the form and return it to me so that I might finish the study and make the results known to the farmers and ranchers of the area.

If you should like to know any further information concerning my study, please feel free to contact me at the Department of Geography, University of Alberta, Edmonton or my home address, Box 722, Cardston, Alberta.

Sincerely,

Esther Kienholz

Dear Sir/Madam,

The supply of grazing land for the ranchers and farmers of south west Alberta is being faced with increasing demands for pasture, particularly seasonal. There has been little documentation, however, of who requires how much, where and when. With the increasing interest of provincial government departments in the area as shown for example by the present Foothills Resource Allocation Study of Lands and Forests, economic geographers such as myself and colleagues in the department of Agricultural Economics at the University of Alberta, are interested in ensuring that the facts about the needs of ranchers and farmers for grazing land are collected and studied. This will assist in efforts to expand the supply of grazing land so that it is adequate and the livelihood of ranchers and farmers is protected.

The study will be made available to local ranchers via the Southern Alberta Grazing Association and the District Agriculturists. Some of the initial results are enclosed for your information. I would be very grateful if you would assit my graduate student, Miss Esther Kienholz, by completing a few final questions which will allow the study to be finished. Confidentiality will be respected in all replies. We were very gratified by your previous assistance.

Thank you.

Yours truly,

R.G. Ironside
Associate Professor
Department of Geography

RGI/vb

For Office Use

THE LINKAGES BETWEEN THE MOVEMENT OF CATTLE TO SEASONAL PASTURES AND LAND TENURE IN SOUTHWESTERN ALBERTA - SUPPLEMENTARY QUESTIONNAIRE

The following questions are intended to supplement information gathered during the summer of 1972 through a mailed questionnaire and personal interviews with involved farmers, ranchers, and other concerned persons. It is stressed that all replies will be treated confidentially and tabulated in a general manner, similar to the accompanying summary report.

If for any reason you do not feel able to answer all of the question, please do not hesitate to return a partially completed form. Accuracy and the applicability of the study, however, both depend on a high response rate. Comments or suggestions will be welcomed and considered in future research.

A self-addressed stamped envelope is included for your convenience. Thank you for your assistance.

****

ALL REPLIES UNLESS OTHERWISE SPECIFIED SHOULD REFER TO 1972

Total Demand

1. Do you move all of your cattle to seasonal pastures?
   a yes
   b no

2. If not, how many animal units do you keep at home?
   a less than 20
   b 20 - 49
   c 50 - 99
   d 100 - 199
   e 200 - 500
   f greater than 500

3. What is your basic herd size in animal units?
   a less than 20
   b 20 - 49
   c 50 - 99
   d 100 - 199
   e 200 - 500
   f greater than 500

4. Do you operate a feedlot during part or all of the year?
   a yes
   b no

5. If so, how many animals do you feed out?
   a less than 20
   b 20 - 49
   c 50 - 99
   d 100 - 199
   e 200 - 500
   f greater than 500

6. Do you buy in extra feeders if you operate a feedlot?
   a yes
   b no

Total Supply

7. Do you, in a normal year, buy in winter feed or do baling on shares?
   a yes
   b no

8. From where do you purchase extra feed?
   a close neighbors
   b other sources within the municipality or closer than 20 miles
   c outside the area

9. For how long do you usually supply your animals with supplementary diet?_____

10. If you either rent or lease land from a private or public source, could you please give the legal description of each parcel of land and whether the basis for renting/leasing is cash or share and if the land is private (deeded) or Crown.

QUARTER	SECTION	TOWNSHIP	RANGE	RENTAL AGREEMENT

11. Land Use Table For the 1972 Crop Season:

Could you please fill in the appropriate spaces in the following table? Acreages should be within 10 acres if possible, even though all acreages will later be grouped into more general classes. If the table in some way does not conform to your operation, please make a note of this.

LAND USE	ACREAGE OR ANIMAL UNIT MONTHS		
	Owned	Leased/Rented (Deeded)	Leased(Crown)
Pasture native- tame-			
Forage (types and tonnage as well) legumes- grasses- legume and grass mixture- other-			
Cereals and Oil Crops used for spring grazing- baled for green feed (tonnage)- harvested- straw baled (tonnage)- stubble grazed in fall-			
Summerfallow			
Other			
Total			

SUMMARY RESULTS

Results from a questionnaire mailed to a sample population of farmers and ranchers in the Municipal Districts of Cardston and Pincher Creek indicate that 69% of the cattle owners move their cattle to seasonal pastures, the phenomenon being slightly more common in the Pincher Creek area than in the Cardston area. Of the 13% who reported that they used to move cattle but no longer do so, the major reason given for discontinuing the practice was that land formerly used for seasonal pasture was either sold or leased.

The most significant system of land tenure under which the land used for seasonal pasture was held, was shown to be deeded land owned by the operator himself, 64% of the population indicating that they held such land. Land rented or leased from another individual, or the Crown, community pastures, forest reserve allotments, and grazing co-operatives all proved to be of significant though lesser importance. Of particular interest was the large variation between the sub areas in the percentage of cattle owners who used the various types of Crown land.

There seems to be a general desire to expand the acreage of pasture land operated. Approximately one half of the respondents indicated a desire to either purchase or rent land from another individual while one third stated their willingness to use community pastures, grazing co-ops, or similar types of jointly controlled grazing areas.

Of those who presently rent or lease pasture land or the use of pasture land, excepting community pastures or forest reserve allotments, by far the largest percentage paid cash per acre on a yearly basis. The only other rental arrangement of any significance was shown to be cash paid for each animal unit per month or per season of grazing.

Practically all or 93% of the sample population reported having some native pasture used seasonally. In addition, 26% stated that they used tame grass, and 17% stated that they possessed some improved native land used as seasonal pasture.

The question concerning time of movement showed the general pattern to be one of movement in the spring and the fall, though it is not known how many times the animals are moved during these two seasons.

While the number of cattle moved per operating unit tended to be larger in the Municipal District of Pincher Creek than in the Municipal District of Cardston, in both cases the most common number moved was between 50 and 99 animals.

Animals of different age groups were separated into different pastures in about one half of all cases but the percentage was higher in the Municipal District of Pincher Creek again. There was little difference in types of animals moved between the two areas. Cows and calves were moved by 90% of the farmers and ranchers while 50% moved yearlings.

The distance that the cattle were moved varied for the most part between 2 and 20 miles. Longer distances were covered by 24% of the farmers and ranchers in the Pincher Creek area and 13% in Cardston. Most of the movement was by trailing though for long hauls and particularly in the spring trucks and cattle vans were used.

APPENDIX II

GRAZING RECORD SINCE 1947 - ALLOTMENTS IN THE SOUTHERN CROWSNEST FOREST RESERVE

GRAZING ALLOTMENTS - SOUTHERN CROWSNEST FOREST RESERVE

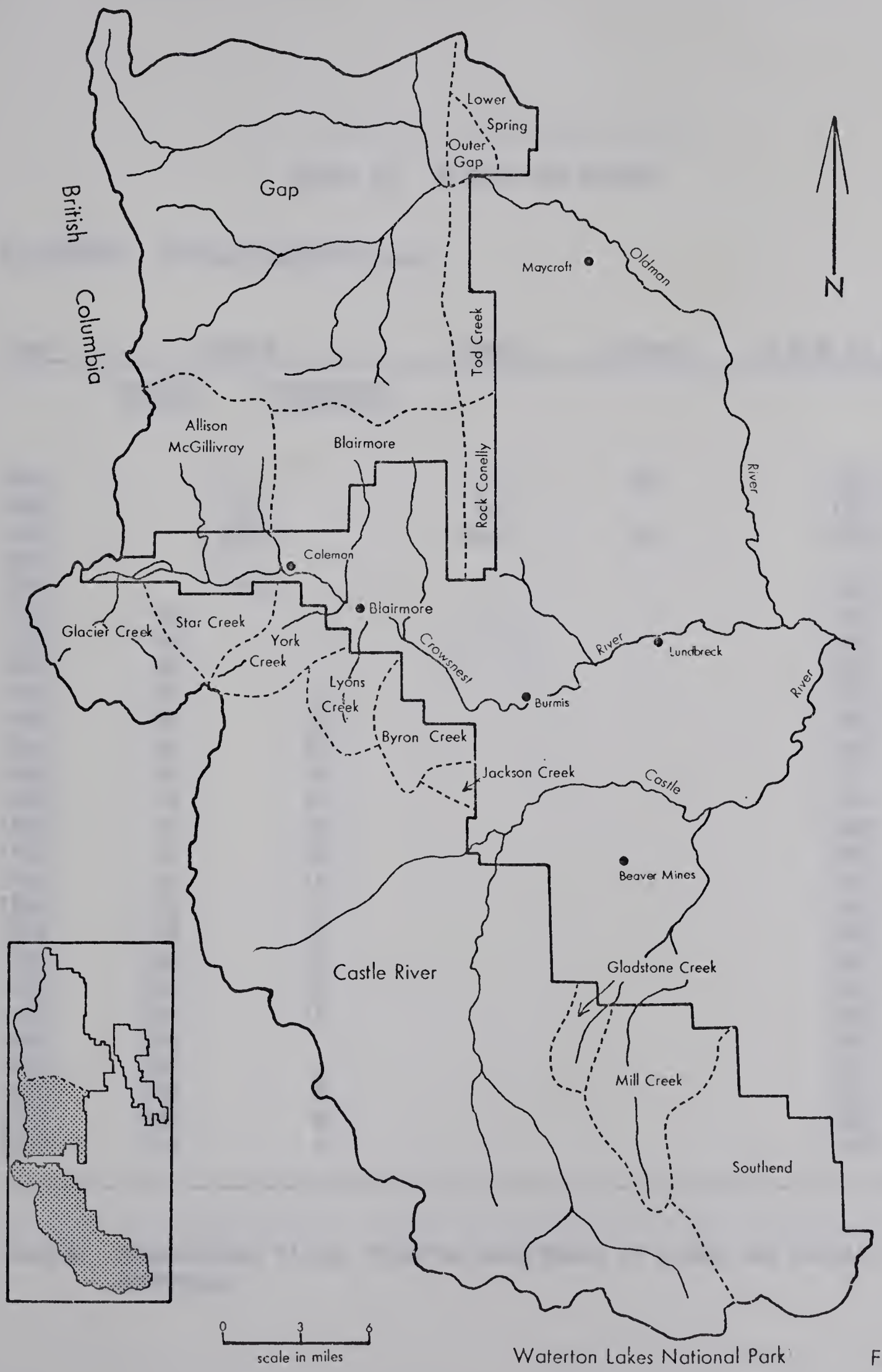


Fig. 29



TABLE 18. ACTUAL USE RECORD

ALLOTMENT: Allison MacGillivray

Year	Cattle		Sheep	Horses	A.U.M.'s Used
	Mature	Yearlings			
1947				25	100
1948		25	Not		100
1949		200	Used	25	900
1950					
1951		40			160
1952	40				160
1953	50				200
1954	54				220
1955	62				250
1956	65	55			480
1957	63	42			464
1958	54	15			271
1959	79	43			394
1960	85	35			460
1961	91	26			264
1962	88	15			398
1963	77	31			394
1964	96	20			530
1965	140	38			584
1966	150	34			643
1967	160	15			500
1968	175				582
1969	153	3			617
1970	146	8			537
1971	166	4			433
1972	164	4			589

Source: Unpublished Files, Alberta Department of Lands and Forest, Edmonton.

TABLE 19. ACTUAL USE RECORD

ALLOTMENT: Blairmore Gold

Year	Cattle		Sheep	Horses	A.U.M.'s Used
	Mature	Yearlings			
1947	155		808		1,249
1948	281				983
1949	134				469
1950	139				486
1951	10				35
1952			600		525
1953			Not Used		
1954			Not Used		
1955	32		138		496
1956	50		150		600
1957	55		128		564
1958	48		127		505
1959	50		123		462
1960			175		437
1961			262		684
1962			262		700
1963	171		6		714
1964	157				459
1965	163				576
1966	135				715
1967	165				584
1968	146				519
1969	145				518
1970	145				518
1971	142				508
1972	88				312

Source: Unpublished Files: Alberta Department of Lands and Forests, Edmonton.

TABLE 20. ACTUAL USE RECORD

ALLOTMENT: Castle River

Year	Cattle		Sheep	Horses	A.U.M.'s Used
	Mature	Yearlings			
1947		1,080		208	5,796
1948		1,180		58	5,571
1949		928		74	4,509
1950		963		78	4,684
1951		960		73	4,648
1952	280	770		25	4,675
1953	351	781		35	4,100
1954	371	644		35	3,700
1955	209	815		20	3,708
1956	567	472		15	3,129
1957	208	720			3,200
1958	198	676			2,964
1959	356	641			2,863
1960	431	503			3,060
1961	440	541			3,060
1962	499	383			2,893
1963	467	462		30	3,147
1964	543	425			3,247
1965	426	451			2,803
1966	503	476			3,416
1967	538	439			4,031
1968	481	487			2,950
1969	416	440			2,655
1970	514	384			2,717
1971	608	318			2,853
1972	586	383			2,859

Source: Unpublished Files, Alberta Department of Lands and Forests, Edmonton.

TABLE 21. ACTUAL USE RECORD

ALLOTMENT: Daisy Vicary

Year	Cattle		Sheep	Horses	A.U.M.'s Used
	Mature	Yearlings			
1947			1,000		1,000
1948			1,200		1,200
1949			1,168		1,168
1950			1,200		1,200
1951			1,200		1,200
1952			1,153		1,153
1953			1,150		1,150
1954			972		972
1955			1,015		1,015
1956			1,000		1,000
1957			1,000		1,000
1958			1,000		789
1959			1,000		531
1960			812		526
1961			1,039		737
1962			995		600
1963			1,040		624
1964			820		533
1965			975		634
1966			1,000		550
1967			Not Used		
1968			956		467
1969			922		549
1970			Not Used		
1971			Part of Gap		
1972					

Source: Unpublished Files, Alberta Department of Lands and Forests, Edmonton.

TABLE 22. ACTUAL USE RECORD

ALLOTMENT: Gap

Year	Cattle		Sheep	Horses	A.U.M.'s Used
	Mature	Yearlings			
1947		994		15	5,246
1948		1,086		5	5,673
1949		1,083			5,631
1950		1,079		5	5,636
1951		935			4,862
1952		867			2,600
1953	158	691			2,467
1954	236	619			2,550
1955	246	618			2,461
1956	304	592			2,434
1957	31	819			2,583
1958	55	707			2,097
1959	11	804			2,259
1960	20	682			2,074
1961	13	728			2,241
1962	35	602			1,952
1963	27	675			2,214
1964	30	771			2,394
1965	25	734			2,159
1966	36	705			2,194
1967	27	748			2,068
1968	25	743			2,105
1969	17	710			1,963
1970	18	766		8	2,182
1971	10	867			2,080
1972		793			2,115

Source: Unpublished Files, Alberta Department of Lands and Forests, Edmonton.

TABLE 23. ACTUAL USE RECORD

ALLOTMENT: Glacier Creek

Year	Cattle		Sheep	Horses	A.U.M.'s Used
	Mature	Yearlings			
1947					
1948					
1949			Not Used		
1950					
1951					
1952					
1953					
1954					
1955					
1956					
1957					
1958					
1959					
1960					
1961					
1962					
1963					
1964					
1965					
1966					
1967					
1968					
1969					
1970					
1971					
1972					

Source: Unpublished Files, Alberta Department of Lands and Forests, Edmonton.

TABLE 24. ACTUAL USE RECORD

ALLOTMENT: Gladstone Creek

Year	Cattle		Sheep	Horses	A.U.M.'s Used
	Mature	Yearlings			
1947		15		20	157
1948		15			67
1949		15		5	90
1950		16		2	81
1951		20			90
1952	20				80
1953	23				54
1954	25				90
1955	26		Not Used		100
1956					
1957					
1958					
1959					
1960					
1961					
1962					
1963					
1964		74			147
1965	34				119
1966	34				136
1967	25				219
1968	25				51
1969	25				73
1970	25				64
1971					
1972	Closed for Wildlife Habitat and Forest Encroachment				

Source: Unpublished Files, Alberta Department of Lands and Forests, Edmonton.



TABLE 25. ACTUAL USE RECORD

ALLOTMENT: Jackson Creek

Year	Cattle		Sheep	Horses	A.U.M.'s Used
	Mature	Yearlings			
1947		110			220
1948		110			220
1949		170			340
1950		50			100
1951		50			100
1952	100				200
1953			93		162
1954	100				200
1955	100				200
1956	100				200
1957	100				200
1958	100				200
1959		Included with Castle River			
1960		Included with Castle River			
1961	52				175
1962	34				102
1963					
1964	36				145
1965	36				142
1966	36				145
1967	35				136
1968	33				102
1969	33				134
1970	34				95
1971	36				90
1972	36				130

Source: Unpublished Files: Alberta Department of Lands and Forests, Edmonton.



TABLE 26. ACTUAL USE RECORD

ALLOTMENT: Lower Spring Creek

Year	Cattle		Sheep	Horses	A.U.M.'s Used
	Mature	Yearlings			
1947		588		19	3,156
1948		690		17	3,676
1949		585		19	3,140
1950		602		7	3,166
1951		570			2,964
1952	110	246			1,350
1953	114	240			1,290
1954	103	265			1,131
1955	67	290			1,267
1956	90	290			1,290
1957	43	331			1,318
1958		317			1,303
1959	26	367			1,281
1960		368			1,225
1961	15	383			1,355
1962	15	383			1,350
1963	32	316			1,371
1964	26	326			1,217
1965	92	227			973
1966	101	138			857
1967	93	115			921
1968	76	203			840
1969	126	139			790
1970	88	209			857
1971	119	123			779
1972	61	140			641

Source: Unpublished Files, Alberta Department of Lands and Forests, Edmonton.

TABLE 27. ACTUAL USE RECORD

ALLOTMENT: Lyon Creek

Year	Cattle		Sheep	Horses	A.U.M.'s Used
	Mature	Yearlings			
1947		Included with Byron Creek			
1948					
1949					
1950					
1951					
1952					
1953					
1954					
1955					
1956					
1957					
1958					
1959					
1960					
1961	28	32			199
1962	30	11			148
1963	36	24			210
1964	30	19			173
1965	35	18			166
1966	42	19			193
1967	48	4			167
1968	40	10			191
1969	46				165
1970	45	6			149
1971	52				144
1972	50				139

Source: Unpublished Files, Alberta Department of Lands and Forests, Edmonton.

TABLE 28. ACTUAL USE RECORD

ALLOTMENT: Mill Creek

Year	Cattle		Sheep	Horses	A.U.M.'s Used
	Mature	Yearlings			
1947			Not Used		
1948			Not Used		
1949				15	75
1950				20	100
1951			Not Used		
1952					
1953					
1954	15				50
1955			Not Used		
1956					
1957					
1958					
1959					
1960					
1961					
1962					
1963					
1964		200			399
1965	87				310
1966	85				296
1967	69				229
1968	69				324
1969	70				216
1970	69				179
1971	69				190
1972			Not Used		

TABLE 29. ACTUAL USE RECORD

ALLOTMENT: Rock-Conelly

Year	Cattle		Sheep	Horses	A.U.M.'s Used
	Mature	Yearlings			
1947	389				1,750
1948	360				1,620
1949	333			18	1,579
1950	342			9	1,579
1951	332				1,494
1952	251				1,052
1953	315				1,000
1954	289				1,009
1955	75	192			900
1956	100	153			850
1957	121	155			713
1958	103	187			987
1959	103	131			885
1960	121	131			885
1961	114	134			919
1962	101	129			842
1963	117	134			849
1964	131	111			926
1965	115	128			850
1966	118	131			928
1967	113	141			827
1968	119	132			930
1969	109	147			930
1970	49	248			739
1971	69	142			753
1972	45	174			698

Source: Unpublished Files, Alberta Department of Lands and Forests, Edmonton.

TABLE 30. ACTUAL USE RECORD

ALLOTMENT: Sentry-York

Year	Cattle		Sheep	Horses	A.U.M.'s Used
	Mature	Yearlings			
1947			Not Used		
1948			Not Used		
1949				10	40
1950			Not Used		
1951	3				12
1952	50				200
1953			Not Used		
1954			Not Used		
1955	50				200
1956	50				200
1957			Reserved - Town Water Supply		
1958					
1959					
1960					
1961					
1962					
1963					
1964					
1965					
1966					
1967					
1968					
1969					
1970					
1971					
1972					

Source: Unpublished Files, Alberta Department of Lands and Forests, Edmonton.

TABLE 31. ACTUAL USE RECORD

ALLOTMENT: Southend

Year	Cattle		Sheep	Horses	A.U.M.'s Used
	Mature	Yearlings			
1947		579	2,375	46	5,781
1948		660	1,135	54	4,632
1949		603	1,473	33	4,703
1950		617	525	35	3,590
1951		495		15	2,295
1952	192	345			2,064
1953	146	394			2,513
1954	177	359	325		1,985
1955	241	299			1,725
1956	230	334			1,669
1957	210	329			1,531
1958	287	311			1,721
1959	254	352			1,872
1960	407	113			1,964
1961	482	84			1,944
1962	474	28			1,919
1963	474	51			2,144
1964	473	83			2,115
1965	397	54			2,093
1966	468	10			1,924
1967	Data Not Available				
1968					
1969					
1970					
1971					
1972					

Source: Unpublished Files, Alberta Department of Lands and Forests, Edmonton.

TABLE 32. ACTUAL USE RECORD

ALLOTMENT: Star Creek

Year	Cattle		Sheep	Horses	A.U.M.'s Used
	Mature	Yearlings			
1947			Not Used		
1948					
1949					
1950					
1951					
1952					
1953					
1954					
1955					
1956					
1957	20	6			96
1958	33	16			156
1959	47	13			212
1960	85	10			390
1961	61	70			428
1962		100			297
1963	20	100			306
1964	21	108			332
1965	92				236
1966	64	63			323
1967	56	80			334
1968	52	112			319
1969	42	96			268
1970	61	87			272
1971	56	67			242
1972	142				290

Source: Unpublished Files, Alberta Department of Lands and Forests, Edmonton.

TABLE 33. ACTUAL USE RECORD

ALLOTMENT: Tod Creek

Year	Cattle		Sheep	Horses	A.U.M.'s Used
	Mature	Yearlings			
1947		264			1,188
1948		249		8	1,156
1949		225		7	1,044
1950		247		8	1,147
1951		235			1,057
1952		227			681
1953	25	150			650
1954	25	150			650
1955	5	195			700
1956	15	185			700
1957	26	166			600
1958	91	275			604
1959	13	182			543
1960	15	173			553
1961	13	200			639
1962		208			670
1963	11	207			670
1964		219			657
1965		207			587
1966		223			662
1967		223			595
1968	6	215			595
1969	103	353			597
1970	61	152			590
1971	49	168			595
1972	22	205			551

Source: Unpublished Files, Alberta Department of Lands and Forests, Edmonton.

TABLE 34. ACTUAL USE RECORD

ALLOTMENT: Outer Gap

Year	Cattle		Sheep	Horses	A.U.M.'s Used
	Mature	Yearlings			
1947		Included in Gap			
1948					
1949					
1950					
1951	50				260
1952		50			225
1953	50				250
1954	12	38			177
1955	12	34			173
1956	50				200
1957	50				132
1958	50				219
1959	50				137
1960	49				221
1961	49				208
1962	49				210
1963	49				225
1964	48				220
1965	50				205
1966	49				184
1967	49				190
1968	41				200
1969	49				200
1970	49				200
1971	49				206
1972	49				187

Source: Unpublished Files, Alberta Department of Lands and Forests, Edmonton.



APPENDIX III

STATUTES AND BY-LAWS

SUPPLEMENTAL BY-LAWS

Waldron Grazing Co-operative Limited

1. *OBJECTS*

Subject to the objects set out in the Memorandum of Association, the objects of the Association are:

(1) To acquire land (with or without mineral rights) and livestock for the use and benefit of the members of the Association.

(2) To improve, cultivate and/or pasture any land.

(3) To improve the crops and livestock of members of the Association, by making stock available for breeding or by advice.

(4) To generally promote the economic and cultural welfare of the members of the Association.

(5) To associate with other organizations, co-operatives or individuals with similar objects for the purposes of mutual aid.

2. *NATURE OF BUSINESS*

The acquiring, operation and maintenance of grazing facilities and the grazing and otherwise feeding and caring for livestock.

3. *CAPITAL*

(1) The capital of the Association shall consist of shares of a par value of One Thousand ($1,000.00) Dollars each. The number of shares shall be unlimited.

(2) At least one-quarter of the par value of a share shall be paid by the member upon allotment thereof.

(3) A member shall pay interest at the rate of six percent (6%) per annum on the amount owing and unpaid on shares at such times and places as the Directors shall decide.

(4) The Directors may make calls on unpaid shares from time to time as the Directors may decide. A member may pay all or part of the balance owing on his shares in advance of calls thereon at such time or times as the member may decide.

4. *MEMBERSHIP*

(1) Membership shall be open to farmers and ranchers and persons interested in farming or ranching, resident in Southern Alberta.

(2) Applications for membership shall be made in writing in a form approved by the Directors.

(3) Qualifications for membership shall be as follows:

(a) No member shall own either directly or indirectly more than twenty-five (25) shares of the Association. For the purposes of this provision, a member and his spouse shall be considered one member.

(b) No member shall own either directly or indirectly less than five (5) shares of the Association.

(c) A member shall be eligible to hold Crown grazing leases from the Province of Alberta under existing laws.

(d) A member shall not hold the maximum Crown grazing leases from the Province of Alberta under existing laws.

(e) No member shall use in any manner whatsoever more than twenty-five (25) shares of the Association.

(4) Notwithstanding the open membership provisions hereof, applications for membership may be rejected by the Directors where in the Directors' opinion such rejection is in the best interests of the Association.

(5) The Directors may approve an application for membership where

the applicant complies with the membership qualifications.

(6) Shares of the Association may be transferred by a member to any person with the approval of the Directors and the Directors may approve a transfer of shares of the Association to another person where:

(a) That person complies with the membership qualifications;

(b) That person assumes the obligation to pay the Association the balance owing on the shares being transferred and the interest chargeable thereon; and

(c) All interest and other amounts owing by the member on the shares to be transferred are fully paid at the date of the transfer.

(7) A member shall at all times comply with the membership qualifications and if he fails to do so, he shall be liable to be expelled by the Directors.

(8) Where a member has been expelled from the Association, or has applied for the transfer of his shares, and the Directors have not approved the transfer, the shares of such member shall be offered to the existing members in the following manner:

(a) A permanent list of the members of the Association shall be prepared by drawing the names of members by lot at a Meeting of the Board of Directors in the presence of two (2) members at large.

(b) The member whose name appears first on the permanent list shall be offered one of the shares by the Directors and such member may accept or reject the transfer of that share to him after which his name shall be placed at the bottom of the

permanent list and the member whose name is then at the head of the permanent list shall have the next opportunity to purchase a share as the same becomes available and so on as shares become available.

(c) All interest and other monies owing to the Association on a share so transferred shall be paid to the Association by the purchasing member before any monies are paid to the retiring member on the purchase price of such shares, and the purchasing member shall assume the balance owing, if any, on a share so transferred and the interest chargeable thereon.

(9) The Directors shall have the right to dismiss any member for actions in their opinion harmful to the Association, for failing to patronize the business of the Association to a minimal amount, or for failure to meet calls on shares as required. Before such dismissal can take effect, the Directors shall invite the member concerned to attend a Directors meeting at which time the reasons for dismissal will be discussed and the member allowed to present his objections, if any, to such dismissal. The member so dismissed may appeal to the next general meeting or annual meeting of the Association and its majority opinion shall be final.

5. *DIRECTORS*

(1) There shall be seven (7) Directors.

(2) The Directors shall fix the remuneration of the Livestock Committee.

(3) The Directors shall not receive remuneration but shall be reimbursed for all reasonable and necessary expenses incurred while on the Association's business and may be awarded a fee or commission

for work or services rendered on behalf of the Association on special projects.

(4) The Directors may borrow and secure payment of money on such terms and conditions as the Directors may by resolution determine.

6. *PASTURE AND FEES*

(1) The Directors shall fix the number of head of cattle per share that may be pastured in each year.

(2) One head of cattle shall include a cow and her calf born within the grazing calendar year. Six yearlings shall be equal to four head of cattle.

(3) The Directors shall fix all fees payable by members for grazing, pasture and bull fees and shall advise the members of the amount of such fees.

(4) The Directors shall fix the dates on which any pasture shall be available for the members; in the absence of dates, the pasture shall be open from the first day of May to the thirty-first day of October in each year.

(5) Any and all fees payable by a member shall be paid in advance of any animals of such member being turned out on the pasture on the Association and in any case, shall be paid not later than the tenth day of April in each year.

(6) No member shall use the land of the Association nor pasture cattle thereon until his fees are fully paid.

(7) A receipt signed by the Secretary-Treasurer or a Director shall be prima facie evidence or proof to the Livestock Committee that any fees specified therein have been paid.

7. LIVESTOCK COMMITTEE

(1) The Directors shall appoint a Livestock Committee in the fall of each year, who shall hold office until their successors are appointed and the Directors shall be at liberty to fill any vacancies which occur in the Livestock Committee.

(2) Any member of the Association, whether or not he be a Director, shall be eligible for appointment to the Livestock Committee.

(3) The Livestock Committee shall meet together as often as the Committee feels it is necessary and, subject to veto or direction by the Directors, shall have the following powers:

(a) To supervise livestock in general.

(b) To select and/or reject bulls and other breeding animals.

(c) To make regulations regarding the grain feeding of animals and pasturing of the animals.

(d) To make regulations covering the use of bulls and of other breeding animals.

(e) To order the removal of animals, which power may be delegated to the caretaker.

(f) To order the registration of animals with the caretaker.

(g) Notwithstanding the foregoing, the approval of the Board of Directors shall be obtained prior to the purchase of animals for breeding purposes.

(h) The Livestock Committee shall keep a written record of its decisions.

(4) The Livestock Committee shall elect its own Chairman, provided that the Chairman of the Committee shall be a Director.

8. LIABILITY

(1) Neither the Association nor the Directors not the Livestock Committee, or any of them, shall be subject to loss or shall be responsible for any loss suffered by members due to diseased, poisoned or straying cattle or theft or predators.

(2) Notwithstanding the foregoing, the Association shall endeavour to see that livestock are free from disease and poison, properly fenced and protected from theft and predators.

9. RESERVES

The Directors shall create such reserve funds for depreciation and improvements as good business practice shall dictate.

10. STANDARD BY-LAWS

The Standard By-laws as amended passed by Regulation 132/57 under the Co-operative Associations Act shall apply to this Association with the exception of Standard By-laws #9 and #17, which shall not apply to this Association.

11. REPEAL

The Supplemental By-laws of the Association, passed at Stavely, in the Province of Alberta on the 17th day of September, A.D. 1962, and registered with the Registrar of Joint Stock Companies in the Province of Alberta on the 24th day of September, A.D. 1962, are hereby repealed and replaced by the within Supplemental By-laws.

The within Supplemental By-laws were passed at the General Meeting of the Association held at Stavely, in the Province of Alberta, on the day of November, A.D. 1962.

BY-LAWS

of the

POLL HAVEN COMMUNITY PASTURE GRAZING ASSOCIATION

MEMBERSHIP

1. (a) Membership fee in the society shall be $1.00 payable on the first day of each year in advance.

(b) Every person who resides in Alberta and who has attained the age of eighteen years shall, upon taking a favorable vote by a majority of the members present at a regular meeting of the society, and upon payment of the membership fee, be admitted to membership in the following order of preference:

(i) Class I:

Persons operating and residing on a ranch or farm property in the vicinity of the public land leased by the society for grazing purposes and who, in the opinion of the Board, are dependent on the leased public land for pasture to maintain a satisfactory ranch or farm unit. The persons main source of income must be from farm or ranch operations.

(ii) Class II:

Persons operating but not residing on ranch or farm in the vicinity of the public land leased by the society for grazing purposes and who, in the opinion of the Board, are dependent on the leased land for pasture to maintain a satisfactory ranch or farm unit.

(iii) Class III:

Persons operating and residing on ranch or farm

property not in the vicinity of the public lands leased by the society for grazing purposes who, in the opinion of the Board, are dependent on the leased public lands to maintain a satisfactory ranch or farm unit.

(iv) Class IV:

All other persons who, in the opinion of the Board

(A) do not fall within the preceding classes, and

(B) require the use of the leased public lands to maintain a satisfactory ranch or farm unit.

(c) When a vote is taken to determine the admission of any person to membership in the society pursuant to clause (b), the members may, by the same vote, require that person to purchase any debenture issued by the society at the time he becomes a member thereof. Where a new member is required to purchase any debenture by a vote of the members and fails to complete the purchase within fourteen days of the date the vote was taken, he shall, ipso facto, cease to be a member of the society.

(d) A member may withdraw from membership by submitting a notice in writing to the secretary of the society.

(e) Every member shall pay his annual membership fee and fifty per cent of the amount of any assessments levied against him in any year by not later than the annual meeting date in each year. The balance of any assessment levied against any member in any year shall be paid not later than a date fixed by the Board of Directors in that year. If any member is in arrears in the payment of his annual membership fee or any assessments levied in any year he shall, ipso facto, be suspended as a member until the said fee and assessments are paid

in full to the society.

(f) If any member transfers, sells, leases, or otherwise disposes of the land comprising his ranch or farm unit, or operates his ranch or farm unit in a manner which, in the opinion of the Board does not require his use of the public lands leased by the society for pasture to maintain a satisfactory ranch or farm unit, the Board may recommend to the members assembled in general meeting that the member be expelled from membership.

(g) When the Board makes the recommendation referred to in subparagraph (f) the members shall proceed to vote upon the acceptance or rejection of the recommendation the result of which shall be governed by a simple majority of those members in good standing who are present in person at the meeting.

(h) Upon a two-thirds majority vote of all members in good standing of the society, any member may be expelled from membership for any cause which the said members deem reasonable and proper.

(i) No bulls allowed in the pasture.

(j) The boundaries of the district for membership shall be: Belly River on West, East line of Leavitt District, Blood Reserve on North, U.S. boundary on South.

(k) All cattle must be ear tagged before entering Pasture.

(l) Anyone granted membership in the society is liable for his share of riding and expenses of the pasture.

(m) No person may enter cattle in pasture unless they are his own property and bearing his own brand.

(n) Person buying property of a shareholder to be given priority of buying that debenture, subject to approval.

(o) Any member not using his membership for three years in succession, loses his equity in pasture and the debenture shall be purchased by the society for resale.

PRESIDENT

2. The President shall be ex-officio a member of all Committees. He shall preside, when present, at all meetings of the society and of the Board. In his absence the Vice-President shall preside at any such meetings, and in the absence of both, a chairman may be elected by the meeting to preside thereat.

BOARD OF DIRECTORS

3. Board of Directors, Executive Committee, or Board, shall mean the Board of Directors of the Society. The Board shall, subject to the by-laws or directions given it by majority vote at any meeting properly called and constituted, have full control and management of the business and affairs of the society and meetings of the Board shall be held as often as the business of the society shall require and shall be called by the President. A special meeting may be called on the instructions of any two members thereof provided they request the President in writing to call such meeting, and state the business to be brought before the meeting. Meetings of the Board shall be called by ten days notice by telegram or telephone. Any four members shall constitute a quorum, and meetings shall be held without notice if the quorum of the Board is present, provided, however, that any business transactions at such meetings shall be ratified at the next regularly called meeting of the Board; otherwise they shall be null and void.

SECRETARY

4. It shall be the duty of the Secretary to attend all meetings of the society and of the Board, and to keep accurate minutes of the same. He shall have charge of the Seal of the society which seal whenever used shall be authenticated by the signature of the Secretary and the President, or, in the case of the death or inability of either to act, by the Vice-President. In case of the absence of the Secretary, his duties shall be discharged by such officer as may be appointed by the Board. The Secretary shall have charge of all the correspondence of the society and be under the direction of the President and the Board.

The Secretary shall also keep a record of all the members of the society and their addresses, send all notices of the various meetings as required, and shall collect and receive the annual fees or assessments levied by the society, such moneys to be promptly turned over to the Treasurer for deposit in a chartered bank or treasury branch as hereinafter required.

TREASURER

5. The Treasurer shall receive all moneys paid to the society and shall be responsible for the deposit of same in whatever bank the Board may order. He shall properly account for the funds of the society and keep such books as may be directed. He shall present a full detailed account of receipts and disbursements to the Board whenever requested and shall prepare for submission to the annual meeting a statement duly audited as hereinafter set forth of the financial position of the society and submit a copy of same to the Secretary for the records of the society. The office of the Secretary and Treasurer may be filled by one person if an annual meeting for the election of officers shall so decide.

AUDITING

6. The books, accounts, and records of the Secretary and Treasurer shall be audited at least once a year by a duly qualified accountant or by two members of the society elected for that purpose at the annual meeting. A complete and proper statement of the standing of the books for the previous year shall be submitted by such auditor at the annual meeting of the society. The 31 day of December in each year shall be the end of the fiscal year of the society.

7. The books and records of the society may be inspected by any member of the society at the annual meeting provided for herein or at any time upon giving reasonable notice and arranging a time satisfactory to the officer or officers having charge of same. Each member of the Board shall at all time have access to such books and records.

MEETINGS

8. The society shall hold an annual meeting on or before the first day of May in each year, of which meeting due notice shall be given to all members. At this meeting there shall be elected a President, Vice-President, Secretary, Treasurer, (or Secretary-Treasurer), and three Directors. The officers and directors so elected shall form a Board, and shall serve until their successors are elected and installed. Any vacancy occurring during the year shall be filled at the next meeting, provided it is so stated in the notice calling such meeting. Any member in good standing shall be eligible to any office in the society.

9. Meetings of the society may be called at any time by the Secretary upon the instructions of the President of the Board by notice in writing to the last known address of each member, delivered in the mail ten days previous to the date of such meeting. A special meeting shall be called

by the President or Secretary upon receipt by him of a petition signed by one-third of the members in good standing, setting forth the reasons for calling such meeting, which shall be by letter to the last known address of each member, delivered in the mail eight days previous to the meeting.

10. Five members in good standing shall constitute a quorum at any meeting.

VOTING

11. Any member who has not withdrawn from membership nor has been suspended nor expelled as herein provided shall have the right to vote at any meeting of the society. Such votes must be made in person and not by proxy or otherwise.

BORROWING POWERS

12. (a) For the purpose of carrying out its objects, the society may borrow or raise or secure the payment of money in such manner as it thinks fit, and in particular by the issue of debentures, but this power shall be exercised only under the authority of the society, and in no case shall debentures be issued without the sanction of an extraordinary resolution of the society.

(b) If debentures are issued by the society to any member to secure the payment of any money borrowed from that member, the member may assign the debenture to the society.

(c) If debentures are issued by the society, every member in good standing at the time the debentures are issued shall purchase at least one debenture. If any member in good standing fails to purchase at least one debenture within fourteen days after the date the debentures are issued he shall, ipso facto, cease to be a member of the society.

13. (1) Any disputes arising out of the affairs of the society and between any members of the society or between

(a) a member or a person who is aggrieved and who has not for more than six months ceased to be a member, or

(b) a person claiming under the by-laws of the society, through the member or aggrieved person

and the society or a director or officer of the society, shall be decided by arbitration in accordance with the provisions of the Arbitration Act.

(2) A decision made by arbitration pursuant to subparagraph (1) is binding on all parties and may be enforced on application to a district court and there is no appeal therefrom.

14. The By-Laws may be rescinded, altered or added to by an "Extra-ordinary Resolution" passed by a majority of not less than three-fourths of such members entitled to vote as are present in person, at a general meeting of which one month's written notice specifying the intention to propose the resolution as an extraordinary resolution has been duly given.

AMENDMENTS TO THE BY-LAWS OF THE FIR GROVE STOCK ASSOCIATION

The following by-laws were approved unanimously by an extra-ordinary resolution at a general meeting of the Fir Grove Stock Association on March 11, 1954.

All bulls for breeding purposes shall be placed on the reserve by June 15 each year and the breeding fee shall be $3.50 per head and shall be payable on June 15.

Beginning in 1954 each member shall be given an equal allotment or quota of stock to be placed on the reserve. When it is necessary to reduce the total number of stock on the reserve each member's allotment or quota shall be decreased equally.

A caretaker or range rider shall be appointed by the executive of the association and the executive shall outline his responsibilities, duties, and rate of pay.

All stock must be ear-tagged before entering a reserve.

The caretaker or range rider shall check and keep a record of all stock entering the reserve or coming off the reserve and no stock shall be placed on or taken off the reserve without his permission.

APPENDIX IV

SELECTED CENSUS DATA - 1971

TABLE 35a. LAND USE - 1971

A. Improved Acreage

	CROPS	PASTURE	SUMMERFALLOW	OTHER	TOTAL
M.D. 6	261,552	54,781	94,005	6,772	417,110
M.D. 9	145,616	24,911	44,000	4,620	219,147
STUDY AREA	407,168	79,692	138,005	11,392	636,257
PROVINCE	18,092,544	2,744,940	7,008,714	614,130	28,460,328

TABLE 35b. LAND USE -1971

B. Unimproved Acreage

	WOODLAND	NATIVE PASTURE	TOTAL
M.D. 6	3,118	384,388	387,506
M.D. 9	13,809	364,865	378,674
STUDY AREA	16,927	749,253	766,180
PROVINCE	1,666,085	19,379,874	21,045,959

TABLE 36. BEEF CATTLE NUMBERS ON FARMS - 1971

	BEEF COWS	BEEF HEIFERS	STEERS	BULLS	CALVES
M.D. 6	36,309	13,016	19,054	2,268	31,361
M.D. 9	28,311	7,699	6,809	1,469	25,411
STUDY AREA	64,620	20,715	25,863	3,737	56,772
PROVINCE	1,270,250	451,141	528,082	71,811	1,157,300

TABLE 37. FIELD CROP ACREAGES - 1971

	WHEAT	OATS (GRAIN)	BARLEY	RAPESEED	FLAX	MIXED GRAINS
M.D. 6	48,097	14,170	120,242	13,507	2,881	1,268
M.D. 9	27,785	13,538	32,011	2,226	915	1,312
STUDY AREA	75,882	27,708	152,253	15,733	3,796	2,580
PROVINCE	3,443,311	1,864,109	5,688,715	1,987,625	270,753	418,888

	RYE	HAY ALFALFA MIXTURE	OTHER TAME	OATS (HAY)	OTHER FODDER CROPS
M.D. 6	1,773	29,283	20,695	4,927	3,141
M.D. 9	445	41,187	15,884	8,983	1,286
STUDY AREA	618	70,470	36,579	13,910	4,427
PROVINCE	249,446	1,622,090	1,638,259	579,336	153,819

APPENDIX V

QUESTIONNAIRE DATA

This appendix summarizes the percentage response, the cross-tabulations which were computed, and the comparability of questionnaire data with census data for 1971. The first questionnaire to be sent out is referred to as Questionnaire A; the second, Questionnaire B. Because of the formats of the two questionnaires, containing both open-ended and closed questions, not all questions are meaningful when discussed in terms of percentage response. These have therefore been excluded from this type of computation. Cross-tabulations were calculated for those questions dealing mainly with land use or land tenure. Because of the small response to a few questions as well as a degree of confusion between Questionnaire A and B, the reasons behind some apparent relationships are rather obscure. Comparable census data was available only for land use, acreage owned, and tenure status.

TABLE 38

PERCENTAGE RESPONSE TO QUESTIONNAIRE A

Question	Percentage Answered Affirmative	Number
1	69	146
2*	13	27
3	(Not applicable)	-
4a**	63.7	93
4b	4.8	7
4c	28.8	42
4d	0.7	1
4e	10.3	15
4f	23.3	34
4g	16.4	24
4h	21.9	32
4i	2.1	3
5	30.8	45
6a	47.9	70
6b	56.2	82
7	(Not Applicable)	-
8a	92.5	135
8b	16.4	24
8c	26.0	38
8d	1.4	2
8e	10.3	15
8f	2.1	3
9	(Not applicable)	-
10a	4.1	6
10b	19.9	29
10c	34.2	50
10d	27.4	40
10e	13.0	19
10f	2.7	4

TABLE 38 (Cont'd)

Question	Percentage Answered Affirmative	Number
11	48.6	71
12a	89.7	131
12b	50.7	74
12c	11.6	17
12d	3.4	5
13a	17.8	26
13b	31.5	46
13c	24.7	36
13d	32.2	47
13e	17.8	26
14a	85.6	125
14b	40.4	59
14c	——	——
15	54.1	79

* Percentage response not applicable to open-ended questions.

** Percentages for Question 4 and subsequent questions are based on a population of 146 or the number of respondent's who move cattle.

TABLE 39

PERCENTAGE RESPONSE TO QUESTIONNAIRE B

Question	Percentage Answered Affirmative	Number
1*	35.9	28
2a	14.1	11
2b	21.8	17
2c	16.7	13
2d	9.0	7
2e	1.3	1
2f	2.6	2
3a	3.8	3
3b	16.7	13
3c	28.2	22
3d	29.5	23
3e	17.9	14
3f	3.8	3
4	39.7	31
5a	5.1	4
5b	9.0	7
5c	7.7	6
5d	7.7	6
5e	5.1	4
5f	5.1	4
6	19.2	15
7	33.3	26
8**	(Not applicable)	-
9	(Not applicable)	-
10	(Not applicable)	-
11	(Not applicable)	-

* Percentages calculated out of a total population of 78.

** Percentage response not calculated for open-ended questions or tables.

TABLE 40

CROSS-TABULATIONS OF DATA FROM QUESTIONNAIRES A AND B

Question		Question
1A	with	4A
		8A
		10A
		12A
		13A
		3B
		4B
		5B
		6B
		7B
		8B
4A	with	8A
		10A
		12A
		13A
		3B
		4B
		5B
		6B
		7B
		8B
8A	with	10A
		12A
		13A
		3B
		4B
		5B
		6B
		7B
		8B

TABLE 40 (Cont'd)

Question		Question
10A	with	12A
		13A
		3B
		4B
		5B
		6B
		7B
		8B
12A	with	13A
		3B
		4B
		5B
		6B
		7B
		8B
13A	with	3B
		4B
		5B
		6B
		7B
		8B
3B	with	4B
		5B
		6B
		7B
		8B
4B	with	5B
		6B
		7B
		8B

TABLE 40 (cont'd)

Question		Question
5B	with	6B
		7B
		8B
6B	with	7B
		8B
7B	with	8B

TABLE 41-LAND USE

A. IMPROVED

Region	Crops	Pasture	Summerfallow	Other	Total
Questionnaire					
M.D. 6	25,073*(61)†	7,246 (18)	7,500 (18)	1,309 (3)	41,128
M.D. 9	21,277 (57)	9,879 (27)	5,169 (14)	804 (2)	37,129
Study Area	46,350 (59)	17,125 (22)	12,669 (15)	2,113 (3)	78,257
Census					
M.D. 6	261,552 (63)	54,781 (13)	94,005 (22)	6,772 (2)	417,110
M.D. 9	145,616 (67)	24,911 (11)	44,000 (20)	4,620 (2)	219,147
Study Area	407,168 (63)	79,692 (12)	138,005 (22)	11,392 (2)	636,257
Province	18,092,544 (63)	2,744,940 (10)	7,008,714 (25)	614,130 (2)	28,460,328

* acres
† percentage (%) of total.

TABLE 41 (Cont'd)

B. UNIMPROVED

Region	Woodland	Other (Native Pasture)	Total
Questionnaire			
M.D. 6	810*(3)†	28,209 (97)	29,019
M.D.9	200 (<1)	100,879 (99)	101,079
Study Area	1,010 (1)	129,088 (99)	130,098
Census			
M.D. 6	3,118 (1)	384,388 (99)	387,506
M.D. 9	13,809 (3)	364,865 (97)	378,674
Study Area	16,927 (2)	749,253 (98)	766,180
Province	1,666,085 (8)	19,379,874 (92)	21,045,959

* Acres.

† Percentage of Total.

TABLE 41 (Cont'd)

	C. TOTAL AREA FARMED	D. NUMBER OF FARMS	E. AVERAGE AREA/FARM
Questionnaire			
M.D. 6	70,147	45	1,559
M.D. 9	138,208	36	3,839*
Study Area	208,355	81	2,572 (1,943)*
Census			
M.D. 6	804,616	691	1,164
M.D. 9	597,821	469	1,275
Study Area	1,402,437	1,160	1,209
Province	49,506,287	62,702	700

* If the largest ranch -51,000 acres - is excluded, the mean farm size is 2,423 ac.

TABLE 42. AREA IMPROVED ON FARMS

	<10 acres	10-69	70-129	130-179	180-239
Questionnaire					
M.D. 6	-	2 (4.5)	2 (4.5)	2 (4.5)	5 (11)
M.D. 9	-	1 (3)	2 (5.5)	1 (3)	2 (5.5)
Study Area	-	3 (3.5)	4 (5)	3 (3.5)	7 (8.5)
Census					
M.D. 6	69 (10)	84 (12)	59 (9)	62 (9)	40 (6)
M.D. 9	33 (7)	30 (6.5)	46(10)	30 (6.5)	39 (8.5)
Study Area	102 (9)	114 (10)	105 (9)	92 (8)	79 (7)
Province	2,216 (3)	4,324 (7)	5,341 (9)	6,769 (11)	4,586 (7)

TABLE 42 (Cont'd)

	240-399	400-559	560-759	760-1,119	1,120-1,599	<1600	Total Farms
Questionnaire							
M.D. 6	2(4.5)	3(6.5)	10(22)	3(6.5)	9(20)	7(15.5)	45
M.D. 9	8(22)	5(14)	5(14)	4(11)	2(6)	6(16.5)	36
Study Area	10(12)	8(10)	15(18.5)	7(8.5)	11(13.5)	13(16)	81
Census							
M.D. 6	95(14)	77(11)	60(9)	56(8)	35(5)	54(8)	691
M.D. 9	96(20.5)	70(15)	56(12)	41(8.5)	16(3.5)	12(2.5)	469
Study Area	191(16)	147(13)	116(10)	97(8)	51(4)	66(6)	1,160
Province	14,038(22)	9,076(14)	6,646(11)	5,365(9)	2,483(4)	1,858(3)	62,072

TABLE 43. SIZE OF FARMS - ACREAGE OPERATED

	<70 acres	70-239	240-399	400-559	560-759
Questionnaire					
M.D. 6	-	-	6(13)	2(4)	9(20)
M.D. 9	-	-	1(3)	1(3)	9(25)
Study Area	-	-	7(8.5)	3(3.5)	18(22)
Census					
M.D. 6	83(12)	101(14.5)	83(12)	68(10)	93(13.5)
M.D. 9	16(3.5)	45(9.5)	52(11)	37(8)	61(13)
Study Area	99(8.5)	146(12.5	135(11.5)	105(9)	154(13)
Province	3,425(6)	10,609(17)	12,606(20)	9,128(14)	8,196(13)

TABLE 43 (Cont'd)

	760-1,119	1,120-1,599	1,600-2,239	>2,240	Total
Questionnaire					
M.D. 6	10(22)	4(9)	9(20)	10(22)	45
M.D. 9	5(14)	7(19)	9(25)	12(33)	36
Study Area	15(18.5)	11(13.5)	18(22)	22(27)	81
Census					
M.D. 6	76(11)	72(10)	38(5.5)	77(11)	691
M.D. 9	93(20)	69(14.5)	39(8)	57(12)	469
Study Area	169(14.5)	141(12)	77(6.5)	134(11.5)	1,160
Province	8,478(13)	4,846(8)	2,479(4)	2,935(5)	62,702

TABLE 44 Tenure of Farms

	AREA			NUMBER			
	Area Owned	Area Rented	Total	Owner	Owner-Tenant	Tenant	Total Operators
Questionnaire							
M.D. 6	57,907 (83)	12,240 (17)	70,147	22 (49)	23 (51)	-	45
M.D.9	108,593 (78)	29,615 (22)	138,208	9 (25)	27 (75)	-	36
Study Area	166,500 (80)	41,855 (20)	208,355	31 (39)	50 (61)	-	81
Census							
M.D. 6	576,512 (72)	228,104 (28)	804,616	391 (57)	243 (35)	57 (8)	691
M.D. 9	428,784 (72)	169,037 (28)	597,821	270 (58)	176 (36)	23 (5)	469
Study Area	1,005,296 (72)	397,141 (28)	1,412,437	661 (57)	419 (36)	70 (7)	1,160
Province	31,712,473 (64)	17,793,814 (36)	49,506,287	37,193 (59)	21,284 (34)	4,225 (7)	62,702

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GOVERNMENT OF THE PROVINCE OF ALBERTA

THE PUBLIC LANDS ACT

being chapter 297 of the Revised Statutes of Alberta 1970
with amendments up to and including December 14, 1973

OFFICE CONSOLIDATION

NOTE

All persons making use of this consolidation are reminded that it has no legislative sanction; that the amendments have been embodied only for convenience of reference, and that the original Acts should be consulted for all purposes of interpreting and applying the law.

THE PUBLIC LANDS ACT

CHAPTER 297

Short title

1. This Act may be cited as *The Public Lands Act.*

[R.S.A. 1970, c. 297, s. 1]

Definitions

2. In this Act,

1. "adjoining lands" means
   (i) lands that adjoin or corner, or
   (ii) lands separated by a road allowance or a surveyed highway or road that would adjoin or corner if they were not so separated, or
   (iii) lands on either side of a correction line that are declared by the Minister to be adjoining lands for the purposes of this Act;
2. "certificate of title" means a certificate of title granted pursuant to *The Land Titles Act* in respect of an estate in fee simple;
3. "Department" means the Department of Lands and Forests;
4. "Director" means the Director of Lands of the Department;
5. "disposition"
   (i) means every instrument executed pursuant to this Act, the former Act, *The Provincial Lands Act* or the *Dominion Lands Act* whereby any estate, right or interest in any lands of the Crown is or has been granted to any person or by which the Crown divests or has divested itself in favour of any person of any estate, right or interest in any lands, and
   (ii) without derogating from the generality of subclause (i), includes a conveyance, assurance, sale, lease, licence, permit, contract or agreement made, entered into or issued pursuant to any of the said Acts and relating to land,

   but does not include a grant;
6. "farm" means an area of land on which commercial farming or ranching operations are conducted;
7. "former Act" means *The Public Lands Act,* being chapter 81 of the Statutes of Alberta, 1949 and chapter 259 of the Revised Statutes of Alberta, 1955;

8. "grant" means letters patent under the Great Seal of Canada or a notification issued pursuant to *The Provincial Lands Act*, the former Act or this Act;
9. "holder" means the holder of a disposition according to the records of the Department;
10. "issue", with reference to a disposition that is required to be executed by the holder, means to mail or deliver two or more copies of the disposition to the intended holder for execution by him;
11. "land" or "lands" does not include mines and minerals;
12. "livestock" means cattle, horses or sheep;
13. "Minister" means the Minister of Lands and Forests;
14. "notification" means a notification in Form A in the Schedule;
15. "officer" means the Director, an inspector or any employee of the Department designated as an officer by the Minister;
16. "public lands" means lands of the Crown in right of Alberta;
17. "Registrar" means a Registrar within the meaning of *The Land Titles Act;*
18. "rent" includes royalties, dues, fees, rates, charges, or other moneys payable by any person to the Crown in right of Alberta under and by virtue of any disposition, but does not include moneys payable as the whole or part of a purchase price;
19. "sub-agent" means an employee of the Department employed as a sub-agent;
20. "township", "section", "half-section", "quarter-section", and "legal subdivision" means
    (i) a township, section, half-section, quarter-section or legal subdivision, respectively, within the meaning of *The Surveys Act*, or
    (ii) with reference to unsurveyed territory, what would be a township, section, half-section, quarter-section or legal subdivision, respectively, if the land were surveyed in accordance with *The Surveys Act*;
21. "Transfer Agreement" means the agreement in the Schedule to *The Alberta Natural Resources Act*, being chapter 21 of the Statutes of Alberta, 1930, and all amendments thereof;
22. "veteran" means any person certified under the *Veterans' Land Act* (Canada) as a veteran.

[R.S.A. 1970, c. 297, s. 2]

Application of Act

Application of Act

3. (1) This Act does not apply to any public lands that are not under the administration of the Minister except where any other Act expressly provides that this Act or any of its provisions are made applicable to those public lands.

(2) All public lands shall be under the administration of the Minister except those public lands that are, by virtue of any other Act or an order of the Lieutenant Governor in Council, under the administration of another Minister of the Crown or of a Crown corporation.

(3) Unless otherwise provided in this Act, every disposition made or entered into

(*a*) under the former Act or the regulations thereunder, or

(*b*) under *The Provincial Lands Act* or the *Dominion Lands Act* or the regulations under those Acts and relating to land,

and any renewal or re-issue thereof, is in every respect subject to this Act and the regulations made under this Act.

[R.S.A. 1970, c. 297, s. 3]

Rules of Law

Title to beds and shores, etc.

4. (1) Subject to subsection (2), the title to the beds and shores of all rivers, streams, watercourses, lakes and other bodies of water is hereby declared to be vested in the Crown in right of Alberta and no grant or certificate of title made or issued before or after the commencement of this Act shall be construed to convey title to such beds or shores.

(2) Subsection (1) does not operate

(*a*) to affect any grant made before or after the commencement of this Act that specifically conveys by express description the bed or shore of any river, stream, watercourse, lake or other body of water, or any certificate of title founded on that grant, or

(*b*) to affect the rights of a grantee from the Crown or of any person claiming under him, where such rights have been determined by a court before June 18, 1931, or

(*c*) to affect the title to any land belonging to the Crown in right of Canada. [R.S.A. 1970, c. 297, s. 4]

Acquisition by prescription

5. No person may acquire by prescription any estate or interest in public lands or, as against the Crown, in any other land. [R.S.A. 1970, c. 297, s. 5]

PART 1

ADMINISTRATION OF PUBLIC LANDS

Officers

Appointment of officers

6. In accordance with *The Public Service Act* there may be appointed a Director of Lands, inspectors and such other officers as may be necessary for the administration of this Act. [R.S.A. 1970, c. 297, s. 6]

Delegation of powers

7. (1) The Minister may, in writing, authorize the Director or any employee of the Department to exercise any powers, duties and functions conferred upon the Minister by this Act or the regulations and specified in the authorization.

(2) The Director may, in writing, authorize any employee of the Department under his supervision to exercise any powers, duties and functions conferred upon the Director by this Act or the regulations and specified in the authorization. [R.S.A. 1970, c. 297, s. 7]

Powers of the Lieutenant Governor in Council

Powers of Lieutenant Governor in Council

8. The Lieutenant Governor in Council may

(*a*) authorize the Minister to sell public lands by public auction or by private sale upon the terms and conditions and at a price not less than the fair value of similar lands in the immediate district in which the public lands are situated, and taking into consideration the purposes for which the land may be used,

(*b*) authorize the Minister to sell public lands to a municipal corporation at a price to be determined by the Minister,

(*c*) authorize the Minister to exchange public lands for other lands, where in the opinion of the Minister adequate compensation is obtained for the public lands,

(*d*) authorize the Minister to make any disposition or grant of public lands in any special case for which no provision is made under this Act or the regulations, and

(*e*) set aside public lands

(i) for use as provincial parks, historical sites, natural areas, wilderness areas, forest reserves, forest recreation areas, game preserves, bird sanctuaries, public shooting grounds or public resorts or for the development of any natural resource, or

(ii) for the purposes of the Government of Canada, either with or without consideration,

(*f*) transfer the administration of public lands to any other Minister of the Crown or to any Crown corporation,

(*g*) transfer the administration and control of any public lands to the Crown in right of Canada upon the terms and conditions and for the reasons set out in the order,

(*h*) authorize the Minister to enter into agreements with the Government of Canada pertaining to the settlement and rehabilitation of veterans on public lands, and order the payment out of the General Revenue Fund of any money payable by the Province under such an agreement,

(*i*) authorize the Minister to enter into an agreement with the Crown in right of Canada to transfer to Canada for National Park purposes the right, title and interest of the Crown in right of Alberta to any public lands,

(*j*) make such orders as may be necessary

(i) to carry out the provisions of this Act according to their intent, or

(ii) to carry out the Transfer Agreement, or

(iii) to meet cases that arise and for which no provision is made in this Act.

[R.S.A. 1970, c. 297, s. 8]

Regulations re dispositions

9. (1) The Lieutenant Governor in Council may make regulations authorizing and governing dispositions of public lands not expressly provided for by this Act, and without restricting the generality of the foregoing, the regulations may, with respect to the dispositions so authorized,

(*a*) restrict the use to be made of lands that are the subject of the dispositions,

(*b*) prescribe the duties and obligations of the persons to whom the dispositions are made in relation to the use and occupation of the lands by them,

(*c*) prescribe the terms and conditions to which the dispositions are subject,

(*d*) provide for the enforcement of compliance with the regulations and remedies for the recovery of moneys payable by virtue of dispositions,

(*e*) prescribe the conditions under which the Minister may cancel a disposition,

(*f*) vary, make inapplicable, or authorize the waiver of compliance with any of the provisions of Part 2,

(*g*) prescribe the form of any disposition and any other documents or forms used in connection with the regulations,

(*h*) provide for the arbitration and settlement of any matter relating to the regulations or the dispositions made under them,

(*i*) provide, as to any provision in the regulations, that its contravention constitutes an offence, and

(*j*) provide for any other procedure or matter that relates to the dispositions.

(2) The regulations may be made retrospective as well as prospective where a disposition was made pursuant to regulations under the former Act in force on the fifth day of April, 1958, and the validity of those regulations is in doubt. [R.S.A. 1970, c. 297, s. 9]

General regulations

10. The Lieutenant Governor in Council may make regulations

(*a*) prescribing the terms and conditions upon which any persons may use public lands for the purpose of geophysical exploration within the meaning of *The Mines and Minerals Act* and governing the conduct of such exploration in relation to the use of public lands,

(*b*) exempting any member of the Canadian Forces from the performance of any covenant, conditon or obligation of a disposition,

(*c*) establishing the procedure for the submission of applications for dispositions, prescribing the form and content of applications and the requirements to be met by applicants to render them eligible to obtain the disposition,

(*d*) requiring or prohibiting the registration of assignments of any dispositions, prescribing their form and manner of execution and the conditions upon which the assignment of a particular disposition may be accepted for registration,

(*e*) requiring the submission of agreements affecting dispositions for the consent of the Minister and prescribing the conditions upon which the Minister may refuse his consent,

(*f*) prescribing the rate of interest at any rate not exceeding six per cent per annum on money payable as the whole or part of the consideration under any disposition, the payment of which is deferred to a date subsequent to the date of the disposition,

(*g*) prescribing the rate of interest at any rate not exceeding six per cent per annum on money payable under any disposition that is not paid within one month from the date it is due,

(*h*) establishing a tariff of fees

(i) for all applications, dispositions, renewals or reinstatements,

(ii) copies of maps, plans, field notes, documents, papers, certificates or other records of the Department,

(iii) for the registration of assignments and transfers under Part 5, and

(iv) for any other service provided by the Department,

and

(*i*) generally for the carrying out of the provisions of this Act according to their intent or to meet cases that may arise and for which no provision is made by this Act. [R.S.A. 1970, c. 297, s. 10]

Regulations re reclamation

11. (1) With respect to public lands to which *The Surface Reclamation Act* does not apply, the Lieutenant Governor in Council may make regulations governing the conditioning, maintenance and reclamation of the surface of public lands that has been or is being held incidental to or in connection with

(*a*) the drilling, operation or abandonment of a well, or

(*b*) the construction, operation or abandonment of a pipe line or battery, or

(*c*) the opening up, operation or abandonment of a mine or quarry.

(2) The Lieutenant Governor in Council may give the Minister power to make such orders as are necessary for the purpose of enforcing the regulations.

(3) The regulations under this section may provide that upon failure of an operator to carry out an order made under the regulations, the Minister may cause the remedial work to be done and the costs incurred

(*a*) shall be paid by the Provincial Treasurer out of the General Revenue Fund, and

(*b*) constitute a debt payable to the Crown by the operator to whom the order was directed.

(4) In this section "operator" has the meaning given to it in *The Surface Reclamation Act*.

[R.S.A. 1970, c. 297, s. 11]

[11. *Repealed 1973, c. 34, s. 63 Proc.*]

Powers of the Minister

Classification of land

12. The Minister may by order classify public lands and declare the use for which he considers them to be adaptable.

[R.S.A. 1970, c. 297, s. 12]

Setting aside natural areas

13. (1) This section does not apply to public lands in that part of Alberta classified by an order of the Minister under section 12 as forest lands and commonly referred to as the "Green Area".

(2) Subject to subsection (3), the Minister shall, with respect to each township, select one or more parcels of undisposed of public lands not exceeding the area of two sections that are in his opinion suitable for establishment as natural areas.

(3) In lieu of making a selection in each township under subsection (1), the Minister may group not more than five adjoining townships for the purposes of this section and

may select anywhere in that group of townships one or more parcels of undisposed of public lands not exceeding the area of 10 sections that are in his opinion suitable for establishment as natural areas.

(4) The Minister shall recommend to the Lieutenant Governor in Council that the lands selected under subsections (2) and (3) be set aside under section 8, clause (*e*) for use as natural areas. [R.S.A. 1970, c. 297, s. 13]

Restrictions on dispositions

14. The Minister may

(*a*) restrict the disposition of or withdraw from disposition any public lands in any specified area, in any manner he may consider warranted, or

(*b*) prescribe, as to any specified public lands or public lands in any area, when and upon what conditions applications for dispositions may be made.

[R.S.A. 1970, c. 297, s. 14]

Minister's powers re application

15. (1) The Minister may

(*a*) defer his approval of an application for a disposition until an investigation has been made of the land for which application is made, or

(*b*) refuse an application for a disposition at any time before the disposition is issued.

(2) The Minister in his discretion may in any manner refuse to accept applications for any specific land or for land in any particular district, and he may settle in such manner as he considers best all disputes that arise between persons applying for the same disposition and he may require the several applicants to submit tenders.

[R.S.A. 1970, c. 297, s. 15]

Forms

16. Except where a form is prescribed by regulation, the Minister may prescribe such forms to be used under this Act as he considers necessary in connection with its administration, or he may prescribe any other form that he considers applicable to any special case.

[R.S.A. 1970, c. 297, s. 16]

Equity in Crown land as part of price

17. The Minister may, in the case of an application for a homestead sale or other sale of agricultural land made by a person who is the holder of a disposition under which he may become entitled to an estate in fee simple in other public lands, enter into an arrangement with the proposed purchaser whereby the Minister, in consideration of the consent of the purchaser to the cancellation of his disposition, shall accept the purchaser's interest, at its fair value, in the public lands held by him under the disposition in payment or partial payment of purchase price under the proposed sale. [R.S.A. 1970, c. 297, s. 17]

Sale of lands

18. The Minister may

(*a*) within two years after any sale by public auction that did not find a purchaser, sell the land by private sale at a price not less than the upset price,

(*b*) sell a part of a quarter-section or a fractional quarter-section of any public land at a price not less than the fair value of similar lands in the immediate district in which the public land is situated,

(*c*) sell the lands contained in a homestead lease to the lessee upon such terms and conditions as the Minister may prescribe if the lessee, in the opinion of the Minister, has faithfully and to the best of his ability endeavoured to perform his obligations under the homestead lease but from some unpreventable cause or mental or physical incapacity or through some technicality has failed in doing so and yet has an equitable claim entitling him to favourable consideration,

(*d*) authorize the Director to reserve public land for any specified reason for a stated period and to permit the use of that land for a stated period by the Crown in right of Canada, by any department of the Government, or by any person, without executing any disposition therefor, and

(*e*) promote good farm cultural practices and require efficient range management community efforts and enterprise and the adoption of farming and grazing practices by lessees for the purpose of preventing soil drifting or overgrazing.

[R.S.A. 1970, c. 297, s. 18]

Grant of public lands

19. (1) The Minister may give public land to

(*a*) the board of trustees of a school district or school division in a rural area, where the land is required as a site for school purposes,

(*b*) a religious corporation or the trustees of a religious society or congregation, where the land is to be used as a site for a church or mission,

(*c*) a religious corporation, the trustees of a religious society or congregation, a municipal corporation or cemetery company as a site for a burial ground, and

(*d*) a society as a site for a community hall.

(2) The area of public land the Minister may give to the board of trustees of a school district or school division pursuant to subsection (1), clause (*a*) shall not exceed twelve acres and the length of the area shall not exceed twice its width.

(3) The area of public land the Minister may give pursuant to subsection (1), clauses (*b*), (*c*) and (*d*) shall not exceed six acres and the length of the area shall not exceed twice its width.

(4) Where the land is to be used as a site for a church, mission or community hall, a notification shall not be issued until a building has been erected upon the land.

(5) A notification issued pursuant to this section shall restrict the use of the land to the purpose for which it is given.

(6) In the case of any grant that restricts the use of the land as a site for school purposes or as a site for a church, mission or community hall, the Minister may order the Registrar to amend or strike out the restricting clause in the subsisting certificate for the land concerned.

[R.S.A. 1970, c. 297, s. 19]

Occupation of lands

20. (1) The Minister may authorize any person

(*a*) to enter upon and occupy public land for a stated period for the purpose of

(i) conducting appraisals, inspections, analyses, inventories or other investigations of the natural resources which may exist thereon, or

(ii) exploring for or excavating fossil remains or objects of geological, ethnological, historical or scientific interest,

or

(*b*) to enter upon and immediately occupy any public land mentioned in any application he has submitted for a disposition thereof.

(2) A person who enters upon and occupies public lands pursuant to an authority under subsection (1), clause (*b*) is bound by this Act in the same manner and to the same extent as if the disposition for which he applied had been granted to him. [R.S.A. 1970, c. 297, s. 20]

Agreements re use of land

21. (1) Where the Minister proposes to sell public land pursuant to section 18 or pursuant to an order of the Lieutenant Governor in Council, the Minister may, as a condition of the sale, require the intended purchaser to enter into an agreement

(*a*) restricting the purposes to which the land to be sold may be used, and

(*b*) requiring the purchaser or his successors in title to retransfer the land to the Crown in the event that the land is no longer used for the purposes referred to in the agreement,

upon such terms and conditions as the Minister prescribes.

(2) An agreement under this section may be registered under *The Land Titles Act* and is not void by reason only that the agreement or any provision of the agreement infringes the rule against perpetuities.

[R.S.A. 1970, c. 297, s. 21]

Prohibition re sales to non-Canadians

21.1 (1) The Minister shall not sell public land pursuant to section 18, the regulations or an order of the Lieutenant Governor in Council, or issue a notification in favour of the purchaser for that land, if the purchaser or one of the purchasers is

(a) a person who is not a Canadian citizen, or

(b) a corporation that is not a Canadian corporation, or

(c) a person or corporation acting as a trustee for a person who is not a Canadian citizen or for a corporation that is not a Canadian corporation.

(2) This section does not apply where the purchaser has entered into an agreement under section 21, subsection (1) or with respect to a sale made before the commencement of this section.

(3) In this section

(a) "Canadian corporation" means

(i) in the case of a corporation with share capital, a corporation in which not less than 75 per cent of the equity shares are registered in the name of and beneficially owned by

(A) one or more Canadian citizens, or

(B) one or more corporations with share capital, if in each case not less than 75 per cent of its equity shares are registered in the name of and beneficially owned by Canadian citizens, or

(C) one or more corporations without share capital if in each case not less than 75 per cent of its members are Canadian citizens, or

(D) any combination of persons or corporations referred to in paragraphs (A), (B) and (C),

or

(ii) in the case of a corporation without share capital, a corporation in which not less than 75 per cent of the members are Canadian citizens;

(b) "equity share" means any share of any class of shares of a corporation carrying full or limited voting rights and any share of any class of shares of the corporation carrying voting rights by reason of a contingency that has occurred and is continuing.

[1973, c. 49, s. 2]

Surveys

22. (1) If for any reason the Minister considers it necessary or advisable to have a survey or re-survey made of the land contained in a disposition to determine its exact

position, or in order to settle any dispute that may arise respecting it, he may direct that such a survey or re-survey be made by an Alberta land surveyor.

(2) The Minister may require payment in advance of the costs of the survey or re-survey to be made by the holder of the disposition concerned in whole or in part, or the Minister may require such portion of the payment of the costs as seems to him just.

(3) If the holder fails to make such payment in advance when required to do so by the Minister, the Minister in his discretion may cancel the disposition.

(4) The surveyor shall file with the Department plans, notes and any other information that may be required to determine the exact position of the land and the Department shall forward a copy of such information to the holder.
[R.S.A. 1970, c. 297, s. 22]

Grants made in error

23. (1) Where, through error, grants have been made for the same land that are inconsistent with each other, the Minister may cancel the grant made in error and order a new grant to the person thereby deprived, of land of a value equal to that of the earlier grant at the time it was made.

(2) Where, through error, dispositions by way of sale, lease or licence have been made for the same land that are inconsistent with one another, the Minister may cause a refund to be made of any money paid on account of the sale, lease or licence with interest at the rate of five per cent per annum.

(3) No claim under this section shall be entertained unless it is submitted to the Department within one year after the discovery of the error.

(4) If a disposition is found to cover public lands included in any disposition or grant of prior date, the later disposition is void in so far as it interferes with the previous disposition or grant.

(5) If a grant is found to cover land included in a grant of prior date, the later grant is void in so far as it interferes with the previous grant. [R.S.A. 1970, c. 297, s. 23]

Withdrawal of land

24. The Minister may, by agreement with the holder,

(*a*) withdraw from the disposition any part of the lands contained in it, or

(*b*) make his disposition subject to another disposition that does not give the holder thereof any exclusive rights of possession. [R.S.A. 1970, c. 297, s. 24]

Cancellation of disposition

25. (1) The Minister may cancel a disposition where

(*a*) the holder of the disposition fails to comply with a provision of this Act, the regulations or the disposition, or fails to comply with a notice given under this Act, or

(*b*) the holder acquired the disposition in error or through fraud, misrepresentation, personation or improvidence, or

(*c*) the holder of the disposition is convicted of an offence against this Act or the regulations that relates to the use of the land contained in his disposition.

(2) The Minister may cancel a disposition if he is requested in writing by the holder to do so.

(3) The Minister may cancel any disposition containing any clerical error, misnomer, or wrong or defective description of land, and issue a correct disposition in its stead.

[R.S.A. 1970, c. 297, s. 25]

Procedure for cancellation

26. (1) Except in the case of cancellation under section 25, subsection (2) or (3) or sections 79, 114 or 115, the Minister shall not cancel a disposition under this Act or pursuant to the disposition itself unless this section has been complied with.

(2) Where the Minister intends to cancel a disposition, he shall send a notice to the holder by mailing it to his last known address according to the records of the Department stating his intention to cancel the disposition after the thirtieth day following the date of the notice and the reason therefor.

(3) If the holder does not object to the cancellation of the disposition or if, in the opinion of the Minister, the holder does not submit satisfactory reasons in objecting to the cancellation within the time limited therefor, the Minister may cancel the disposition.

(4) Where the provisions of the disposition itself prescribe a procedure for cancellation that is more advantageous to the holder than the procedure prescribed by this section, the Minister shall comply with the procedure prescribed in the disposition. [R.S.A. 1970, c. 297, s. 26]

Reinstatement of disposition

27. The Minister may by order reinstate any disposition that has been cancelled or forfeited if

(*a*) the application for reinstatement is made within six months of the date on which the disposition was cancelled or forfeited,

(*b*) the land contained in the disposition is, at the time the application is made,

(i) available so as to permit the reinstatement to be made, and

(ii) classified as being adaptable for the same use as that permitted under the disposition,

and

(*c*) the applicant complies with any terms and conditions prescribed by the Minister upon acceptance of the application. [R.S.A. 1970, c. 297, s. 27]

Application of purchase moneys

28. (1) If upon the cancellation or expiration of a disposition, there is in the hands of the Minister any money in excess of the amount owing under it, the Minister may apply the excess in payment of any rates or taxes due and owing in respect of the interest under that disposition.

(2) When an agreement for the sale of public lands is cancelled or the purchaser surrenders his interest to the Minister, and the purchaser is in arrears for taxes on the land or for irrigation rates under *The Irrigation Act* the Minister may apply not more than one-half of the amount paid by the purchaser as principal under the agreement in payment of the arrears.

(3) Subsection (2) does not apply where the agreement for sale pertained to

(*a*) lands situated in a land clearing and breaking project that was obtained in substitution for a homestead lease of the same lands, or

(*b*) lands shown in the records of the Department as "tax recovery lands". [R.S.A. 1970, c. 297, s. 28]

Notifications

Notifications

29. (1) When any person is entitled to receive a title for an estate in fee simple to any public lands, a notification in Form A in the Schedule shall be issued, which shall be

(*a*) signed by the Minister or Deputy Minister, and

(*b*) signed by the Director.

(2) Before issue of the notification the fee payable under *The Land Titles Act* shall be paid to the Minister.

(3) The Minister shall forward the notification to the Registrar.

(4) Where a certificate of title has not been issued by the Registrar for any public lands vested in or belonging to the Crown, the Minister may issue a notification in Form A in the Schedule in favour of the Crown in right of Alberta or of Canada.

(5) When a notification is issued under subsection (4) it shall be forwarded to the Registrar who shall, without fee, forthwith issue a certificate of title.

[R.S.A. 1970, c. 297, s. 29]

Assistance in effecting sale

30. (1) Where the holder of a homestead lease, homestead sale or other agreement for the sale of public lands desires to effect the sale of part of the land contained in his

disposition to another person, the Minister may, in consideration of an amount of money specified by him, enter into and carry out an arrangement under this section with the holder and the proposed purchaser for the purpose only of effecting that sale to the proposed purchaser.

(2) In carrying out an arrangement made pursuant to subsection (1)

(*a*) the Minister shall cancel the disposition as to lands concerned, with the consent of the holder,

(*b*) the Minister shall issue a notification in favour of the purchaser with respect to the land concerned,

(*c*) the moneys paid to the Minister under subsection (1) shall be credited to the payment of amounts owing or thereafter becoming due to the Minister under the disposition,

(*d*) the Minister may waive compliance by the holder of any terms or conditions of the disposition, and

(*e*) the Minister shall not pay any costs incurred in connection with surveying or arranging for the registration under *The Land Titles Act* of any plan of survey of the land to be sold.

[R.S.A. 1970, c. 297, s. 30]

Notifications to deceased persons

31. When a notification issues to or in the name of a person who is dead, the notification is not void for that reason but the title to the land thereby granted or intended to be granted vests in the personal representative of the deceased person as if the notification had issued to or in the name of the deceased person during his lifetime.

[R.S.A. 1970, c. 297, s. 31]

Correction of grant

32. (1) When a grant has issued to or in the name of a wrong person or contains any clerical error, misnomer, or wrong or defective description of the land thereby intended to be granted, or when any of the conditions of the grant have been omitted, the Minister may, if there is no adverse claim, direct the defective grant to be cancelled and a correct notification to be issued in its stead.

(2) The correct notification relates back to the date of the grant cancelled and has the same effect as if issued at the date of the cancelled grant.

[R.S.A. 1970, c. 297, s. 32]

Refusal to issue notification

33. The Minister may refuse to issue a notification to any person who is liable to Her Majesty or the Minister for the payment of any money or the delivery of any crop share.

[R.S.A. 1970. c. 297, s. 33]

Dispositions

Exceptions and reservations in dispositon

34. (1) All mines and minerals and the right to work the same are, by implication and without the necessity for any express words of exception, excepted from every disposition and notification made under this Act.

(2) The Minister in the case of any disposition or grant, or any kind of disposition, may direct that it shall be made subject to any reservation or exception that he may prescribe. [R.S.A. 1970, c. 297, s. 34]

Execution of disposition by Crown

35. (1) Dispositions may be executed on behalf of the Crown by the Minister, the Deputy Minister, the Director or by any other officer of the Department authorized to do so by the Minister, and no seal is necessary in connection with executions on behalf of the Crown.

(2) A permit may be issued by delivering it or mailing it to the holder and the signature of the person authorized to sign it on behalf of the Crown may be reproduced by any means on the permit. [R.S.A. 1970, c. 297, s. 35]

Execution by holder

36. (1) The execution of a disposition or an assignment or surrender of a disposition by a person other than a corporation is valid to the same extent as if it were under seal if it is executed by that person by the making of his signature and without the use of a seal.

(2) For the purposes of this Act, a disposition, an assignment or surrender of a disposition or any instrument executed in connection with this Act or the regulations shall be deemed to be sufficiently executed by a body corporate if it is sealed with its corporate seal and signed by one officer or two directors of the body corporate, notwithstanding anything to the contrary contained in any statute, charter of incorporation, memorandum of association or articles of association. [R.S.A. 1970, c. 297, s. 36]

Number and gender

37. Where the singular or masculine or neuter is used in any disposition, it shall, when the context or parties require, be construed to mean respectively the plural or feminine or a corporation. [R.S.A. 1970, c. 297, s. 37]

Rights of holder

38. (1) When a disposition required to be executed by the holder is issued, the person in whose favour it is made

(*a*) shall, subject to subsection (2), be deemed to be the holder thereof as against the Crown and all other persons as of the date of the disposition, and

(*b*) shall be bound by the disposition to the same extent as if it were fully executed.

(2) When a disposition is issued and the intended holder fails to execute the disposition and return it to the Department at Edmonton within ninety days from the date the disposition is dated

(*a*) the Minister may cancel the disposition, and

(*b*) the intended holder shall be deemed to have been the holder of the disposition only as to any liability incurred by him under it.

[R.S.A. 1970, c. 297, s. 38]

Disposition of fees

39. (1) Where money is paid to the Minister by an applicant for a disposition or by the original holder of a disposition for any purpose incidental to the application or the disposition, and where the Minister determines that the applicant or the holder is entitled to a refund of all or any portion of the money, the Minister may

(*a*) pay the money to the applicant or the holder if the applicant or the holder is not indebted to the Crown, or

(*b*) apply the money in payment of any debt the applicant or the holder owes to the Crown.

(2) Where a disposition is issued and the applicant refuses to execute it in accordance with section 38, subsection (2) or where an applicant for a disposition fails to comply with any condition required to be complied with before the issue of the disposition any moneys paid by the applicant or any portion thereof may be forfeited to the Crown at the direction of the Minister.

[R.S.A. 1970, c. 297, s. 39; 1971, c. 96, s. 10 (a)]

No warranty re land

40. No disposition shall be construed to contain any implied warranty or condition as to the quality or fitness for a particular purpose of the land described in the disposition.

[R.S.A. 1970, c. 297, s. 40]

Minors

41. A disposition held by a minor and an assignment of a disposition by or in favour of a minor is as binding upon the minor as if he were of full age.

[R.S.A. 1970, c. 297, s. 41]

Consent to assignment, etc.

42. The holder shall not assign, transfer or sublet the lands contained in his disposition, or any part thereof, without the consent of the Minister in writing.

[R.S.A. 1970, c. 297, s. 42]

Minister to determine compliance

43. (1) The Minister shall determine whether or not the terms and conditions of a disposition are being performed, observed or complied with and his decision is final and binding upon the holder of the disposition.

(2) At such time and in such form as may be required by the Minister, the holder of a disposition shall furnish proof by declaration or otherwise that he has complied with any or all the provisions of his disposition.

[R.S.A. 1970, c. 297, s. 43]

Recovery of Rent, etc.

Recovery by distress

44. (1) The Minister may recover by distress

(*a*) rent owing under a disposition, or

(*b*) moneys owing under a loan contract made pursuant to *The Homestead Lease Loan Act.*

(2) *The Seizures Act* applies to a distress under this section. [R.S.A. 1970, c. 297, s. 44]

Seizure of grain

45. (1) The Minister may by order authorize an officer to seize any grain owned by a lessee who defaults in payment of

(*a*) rent owing under a cultivation lease, or

(*b*) any crop share rent owing under a disposition, or

(*c*) any money owing under a loan made pursuant to *The Homestead Lease Loan Act.*

(2) When any grain is seized pursuant to this section, the officer making the seizure shall deliver a notice in Form B to the lessee by

(*a*) giving it to him personally, or

(*b*) posting it in a prominent place on the land described in the lease, or

(*c*) mailing it to his last known address according to the records of the Department.

(3) Any costs or expenses incurred by the officer in making a seizure under this section shall be deemed to be part of the unpaid rent or loan payment for which the seizure was made.

(4) When an officer seizes grain under this section, he may

(*a*) have the grain carried to any convenient place of storage, or

(*b*) leave the grain in the possession of the lessee, or

(*c*) sell the grain at a price as near as possible to the current market price.

(5) When any grain is seized pursuant to this section, the officer making the seizure may sell all of the grain seized or a sufficient quantity thereof to satisfy the total amount owing by the lessee at the time the grain is sold.

(6) Where the amount owing by the lessee at the time the grain is sold exceeds the amount he owed when the seizure was made, the officer shall, before he sells the grain, deliver an amended notice in Form B to the lessee.

(7) The Minister may refund to the lessee the amount, if any, by which the proceeds of the sale exceed the expenses of the sale and the total amount owing by the lessee at the time the grain is sold.

(8) No officer while discharging his duties under this section, or any officer assisting him, is liable for trespass on privately owned land. [R.S.A. 1970, c. 297, s. 45]

Unauthorized Use of Public Lands

Unauthorized use

46. Any person who occupies public lands and

(*a*) is not the holder of a disposition authorizing him to do so, or

(*b*) is not otherwise authorized to do so under this Act or the regulations,

shall be deemed to be a trespasser and any improvements created by him are the property of the Crown.

[R.S.A. 1970, c. 297, s. 46]

46.1 and **46.2** Repealed 1972, c. 79, s. 2

Payment for unauthorized use

47. (1) The Minister may require a person who without authority

(*a*) makes use of public lands, or

(*b*) as a holder of a disposition, makes use of the public lands contained in his disposition for any purpose other than that for which the disposition was granted without the consent of the Minister,

to pay such sum of money as the Minister may prescribe in addition to the regular rate prescribed for such use.

(2) The sum of money prescribed by the Minister pursuant to subsection (1) is a debt payable to the Crown on demand by the Minister. [R.S.A. 1970, c. 297, s. 47]

Unauthorized seeding of crops

48. Where a person without authority seeds a crop on public lands, the Minister may

(*a*) authorize an officer to seize the crop either before or after it is harvested, and

(*b*) order the crop to be disposed of as he decides.

[R.S.A. 1970, c. 297, s. 48]

Seizure of clay, marl, sand or gravel

49. (1) Where an officer believes on reasonable grounds that any clay, marl, sand or gravel, has been removed unlawfully from public lands, he may seize the clay, marl, sand or gravel, and any vehicle, tools or equipment used to remove or transport the clay, marl, sand or gravel.

(2) Any officer making a seizure under this section shall make a written report to the Minister and shall retain any thing seized until the Minister instructs him how to dispose of it.

(3) When the Minister receives a report of a seizure he may

(*a*) order whatever is seized to be confiscated to the Crown in right of Alberta and may dispose of it in any way he considers proper, or

(*b*) order whatever is seized to be returned to the person from whom it was seized.

[R.S.A. 1970, c. 297, s. 49]

Destruction of or injury to surface

50. The holder of a disposition shall not do any act or thing which injures or destroys, or which is likely to injure or destroy, the surface of the public land described in the disposition unless

(*a*) he has obtained the authorization of the Minister, or

(*b*) he is authorized by the disposition to injure or destroy the surface. [R.S.A. 1970, c. 297, s. 50]

Prohibitions

51. (1) No person shall cause, permit or suffer

(*a*) the accumulation of waste material, debris, refuse or garbage on public land, or

(*b*) the existence on public land of any structure or excavation of any kind that is undesirable in the Minister's opinion, or

(*c*) the existence on public land of any condition which, in the opinion of the Minister, may cause danger by fire to life, property or forest growth, or

(*d*) the doing of any act on public land that may injuriously affect watershed capacity, or

(*e*) the disturbance of any public land in any manner that results or, in the opinion of the Minister is likely to result, in injury to the bed or shore of any river, stream, watercourse, lake or other body of water or land in the vicinity thereof, or

(*f*) the creation of any condition on public land which, in the Minister's opinion, is likely to result in soil erosion.

(2) In respect of any act prohibited by this section, the Minister may

(*a*) order the person responsible for doing the act to take such remedial action as the Minister may direct within such time as the Minister considers reasonable, and

(*b*) if that person fails to comply with the order of the Minister, cause any remedial action to be taken that the Minister considers necessary and recover any costs so incurred as a debt owing to the Crown.

(3) The Crown has, in addition to any cause of action under subsection (2), a right of action against the person to whom an order is given under this section for exemplary damages by reason of the doing of an act prohibited by subsection (1) or the failure to comply with the order or both. [R.S.A. 1970, c. 297, s. 51]

Offences and Penalties

Offence

52. Any person who is unlawfully occupying public lands and fails to comply with an order by the Minister requiring him to vacate the land forthwith after its service upon him, is guilty of an offence. [R.S.A. 1970, c. 297, s. 52; 1971, c. 88, s. 3; 1972, c. 79, s. 3]

Offences re Crown land, property, etc.

53. (1) A person who

(*a*) removes any property belonging to Her Majesty from public lands without authority, or

(*b*) without lawful authority destroys, defaces or removes any notice posted up under the authority of the Act, or

(*c*) contravenes any provision of section 50 or 51,

is guilty of an offence.

(2) Any person who hinders, obstructs or impedes any officer in the performance of his duty under the Act is guilty of an offence. [R.S.A. 1970, c. 297, s. 53]

Prohibited practices at sales

54. Any person who, before or at the time of a public sale of public lands, by intimidation, combination, unfair management or otherwise, hinders or prevents, or attempts to hinder or prevent, any other person from bidding upon or purchasing any lands offered for sale, is guilty of an offence. [R.S.A. 1970, c. 297, s. 54]

General penalty

55. Every person who is guilty of an offence under this Act or the regulations for which no penalty is provided is liable upon summary conviction to a fine not exceeding three hundred dollars and in default of payment to imprisonment for a term not exceeding sixty days. [R.S.A. 1970, c. 297, s. 55]

Miscellaneous

Improvements

56. (1) A person applying for a disposition shall, after his application is approved and before the disposition is issued, pay to the Minister an amount of money equal to the most recent valuation made by an inspector of the Department of the improvements upon the lands to which the application relates.

(2) The Minister may exclude the whole or any part of the fencing from the value of the improvements.

(3) Cultivation is not an improvement unless the Minister declares it to be an improvement.

(4) Public land seeded to tame hay or grass shall be deemed to be cultivated land.

(5) Where an application is made for a disposition of land on which clearing or breaking has been done by a former holder with the aid of a loan made pursuant to *The Homestead Lease Loan Act*, and the loan has not been repaid in full, the applicant shall pay for such clearing or breaking where it is declared an improvement in the manner directed by the Minister.

(6) Notwithstanding anything in this section, the Minister may defer the payment of any amount required to be paid under this section in excess of the portion, if any, required to be applied or refunded under section 57, and where a deferment is made the disposition shall provide that the amount deferred be paid by the holder of the disposition on the date or dates fixed in the disposition for the payment thereof. [R.S.A. 1970, c. 297, s. 56]

Application of moneys collected for improvements

57. Where a disposition is cancelled or expires and moneys are paid on account of improvements under section 56 on a subsequent application for a disposition of all or a part of the land contained in the cancelled or expired disposition, the Minister may

(*a*) apply those moneys to the payment of any amounts owing under the cancelled or expired disposition,

(*b*) apply the balance, if any, for the purpose of paying any other debt to the Crown, any taxes owing to a municipality, any debt to a municipality arising out of the use of the land described in the cancelled or expired dispositon, or any debt owing by the former holder to a rural electrification association incorporated under *The Co-operative Associations Act*, and

(*c*) refund the whole or part of the balance, if any, to the person who, in the opinion of the Minister, is entitled to it. [R.S.A. 1970, c. 297, s. 57]

Disposal of chattels and improvements after termination of disposition

58. (1) During the term of any disposition or where

(*a*) a disposition is surrendered or cancelled or has expired, or

(*b*) any land is withdrawn from a dispositon of public land,

the Minister may decide whether or not any building or other improvement on the land that is or was contained in the disposition is affixed to that land and is to be considered a part thereof.

(2) When a disposition is surrendered or cancelled or has expired or when any land is withdrawn from a disposition, the holder of the disposition at the date of the surrender, cancellation, expiration or withdrawal may

(*a*) subject to subsection (4), and

(*b*) before the expiration of one month following that date,

remove from the public lands formerly in the disposition any chattels owned by him and any buildings or improvements erected or created by him.

(3) The Director may, by notice in writing addressed to the holder referred to in subsection (2), extend the period of time provided by that subsection.

(4) Any chattels, buildings or other improvements on public lands are forfeited to the Crown in right of Alberta

(*a*) when the one month period referred to in subsection (2) and any extension thereof prescribed by the Director has expired, or

(*b*) when any disposition is cancelled or expires if the holder at the time of the cancellation or expiry of the disposition is indebted to the Crown or to the Minister.

(5) When any chattels, buildings or other improvements on public land are forfeited to the Crown pursuant to subsection (4), clause (*b*), the Minister may

(*a*) sell the chattels, buildings or other improvements in satisfaction of the indebtedness, and

(*b*) deal with the amount, if any, by which the proceeds exceed the expenses of the sale and the indebtedness in the same manner as that provided for under section 57 with respect to amounts collected from an applicant on account of improvements.

(6) When

(*a*) the Minister decides that any building or other improvement is affixed to and forms a part of public land and the building or improvement is not owned or was not created by any person who occupies the public land pursuant to a disposition, or

(*b*) the building or other improvement is forfeited to the Crown pursuant to subsection (4), clause (*a*),

the Minister may authorize any person to remove, demolish, sell or otherwise dispose of the building or improvement.

(7) When the Minister issues an authorization to any person pursuant to subsection (6), he may require that person to

(*a*) post a notice on the building or improvement stating that, on or after the thirtieth day following the posting of the notice, the building or improvement will be removed from the land, demolished, sold or otherwise disposed of, and

(*b*) cause a notice to appear once a week for two consecutive weeks in a newspaper circulating in the vicinity of the land upon which the building or improvement is situated describing the building or improvement, the land upon which it is situated, and stating that it will be removed, demolished, sold or otherwise disposed of on or after the thirtieth day following the last appearance of the notice.

(8) During the term of any disposition the Minister may authorize any person to enter upon the land and remove any chattels, fencing, buildings, or other improvements that are not owned by the holder of the disposition.

(9) Where any chattel other than an improvement deemed by the Minister to be affixed to land and to form a part thereof is found on any public land and the owner thereof cannot be ascertained or located upon reasonable inquiry, the Minister may cause the chattel to be confiscated, removed from the public land and disposed of in any manner he thinks fit.

(10) When the owner of any chattel referred to in subsection (9) is ascertained, the Minister may by notice in writing

(*a*) require the owner to remove the chattel from the public land on or before a day designated in the notice, and

(*b*) advise the owner that if the notice is not complied with the chattel may be confiscated and disposed of in any manner the Minister thinks fit.

(11) When

(*a*) the Minister disposes of any chattels, buildings or other improvements pursuant to subsection (5), or

(*b*) any building or other improvement is disposed of pursuant to subsection (6), or

(*c*) any chattel is confiscated, removed and disposed of pursuant to subsection (9),

all the right, title and interest of any person who may be the owner of, or may have any interest in, the building, improvement or chattel ceases. [R.S.A. 1970, c. 297, s. 58]

Stray livestock on vacant lands

59. (1) All livestock found on public lands that are not the subject of a disposition are the property of the Crown in right of Alberta as against every one except a person who is able to establish a better title thereto.

(2) Any person appointed for the purpose by the Minister may round up, seize and detain any livestock that are found on any public lands that are not the subject of a disposition.

(3) Upon seizing any livestock bearing any visible brand, mark or vent and any offspring running with them, the person making the seizure shall send to the owner by mail at his last known post office address, a notice in writing setting out

(*a*) the date of seizure,

(*b*) the description of the livestock seized,

(*c*) the description of the place at which the livestock is kept, and

(*d*) the amount of rental payable for the use of the public lands upon which the livestock was found grazing.

(4) Unless the owner pays to the Minister the amount owing under subsection (3), clause (*d*) together with the costs of rounding up, seizing and detaining the livestock by the expiration of fifteen days from the date of the mailing of the notice, the Minister may dispose of the livestock in any manner he sees fit.

(5) Where seizure is made of livestock not bearing any visible brand, mark or vent, the Minister may dispose of them in any manner he thinks fit.

(6) The property in any livestock that is disposed of by the Minister pursuant to this section passes to the purchaser and all rights of property that existed in the livestock immediately before the sale are extinguished.

(7) Any moneys received by the Minister as a result of a disposition of livestock pursuant to subsection (4) or (5) shall be applied firstly in payment of the costs incurred in seizing, rounding up, detaining, offering for sale and selling or otherwise disposing of the livestock and, secondly, in payment of the sum payable to the Minister under subsection (3), clause (*d*).

(8) The balance, if any, shall be paid to the persons who, in the opinion of the Minister, are entitled thereto and who, within six months after the date of the sale, make application in writing to the Minister for payment.

(9) If after the expiration of six months from the date of the sale and after paying such persons as have within that period made application for payment, any surplus remains, the surplus shall be paid into and forms part of the General Revenue Fund. [R.S.A. 1970, c. 297, s. 59]

Duties of holder

60. A holder of a disposition shall with respect to the land contained in his disposition

(*a*) use only first class seed that is free and clear of all noxious weeds,

(*b*) cut, keep down and destroy all noxious weeds,

(*c*) submit to the Minister when requested by him to do so a plan and a statement showing the purpose for which the land is to be used or developed and the manner in which that use or development is to be achieved, and

(*d*) use the land in a proper and husbandlike manner. [R.S.A. 1970, c. 297, s. 60]

Shelter belts, etc.

61. (1) In wooded, parkland or brush-covered areas the holder of a disposition shall preserve and maintain for shelter belts, windbreaks and woodlots such areas of brush and forest cover as may from time to time be prescribed by the Director.

(2) In any area where there is no native tree growth the lessee shall plant shelter belts and windbreaks in firebreaks or clumps or plantations for future use as may from time to time be prescribed by the Director.

[R.S.A. 1970, c. 297, s. 61]

Sale of disposition in execution

62. Where the interest of a holder of a disposition is seized in execution, no sale in execution of that interest is effective unless

(*a*) it is made to a person who would be eligible to acquire it as an assignee from the holder, and

(*b*) an assignment or transfer in favour of the purchaser is consented to by the Minister and registered under Part 5. [R.S.A. 1970, c. 297, s. 62]

Exemption from tax recovery proceedings

63. Where the holder's interest under a disposition is liable to

(*a*) assessment and taxation in any city, town, new town, village, municipal district, county, improvement district, school district or school division, or

(*b*) assessment and the payment of rates in any irrigation district or drainage district,

the holder's interest is not subject to any Act providing for the recovery of taxes or rates to the extent that its provisions relate to the sale of land for the purpose of such recovery. [R.S.A. 1970, c. 297, s. 63]

Application of rent on taxes

64. (1) The Provincial Treasurer shall transfer to the taxing authority moneys received as rent or purchase moneys under a disposition of public lands or as compensation to the Crown by reason of expropriation of the Crown's interest in public land, where that land is

(*a*) in an improvement district, municipal district or county,

(*b*) land the title to which was recovered through tax enforcement proceedings, and

(*c*) land that is shown in records of the Department as "tax recovery land".

(2) The moneys received from such land shall be transferred immediately at the close of the fiscal year or at such other time as the Minister may direct.

(3) In so far as they affect a crop share cultivation lease granted under the former Act or *The Provincial Lands Act*, the provisions of this section are subject to section 5 of *The Crown Cultivation Leases Act*.

[R.S.A. 1970, c. 297, s. 64]

Inspection of grain records

65. Where a disposition provides for payment of rent on a crop share basis, the Minister may authorize any person to inspect any storage ticket, book of account or other document or record relating to the possession, delivery, transportation, storage or other dealing with the crop, share of crop or portion thereof grown on the lands held under the disposition, and for that purpose the person so authorized may enter during the hours of daylight the lands and premises of the holder, or of any elevator, storage or transportation company, or of any other person, if on reasonable grounds he believes that any storage tickets, books of account or other documents or records are located therein.

[R.S.A. 1970, c. 297, s. 65]

Right to enter oaths

66. Any person acting lawfully in the performance of duties assigned to him under this Act or the regulations may enter any lands held under a disposition or buildings erected thereon for the purpose of surveying or examining the state and condition thereof.

[R.S.A. 1970, c. 297, s. 66]

Administration of

67. All affidavits, oaths, statutory declarations and solemn affirmations required to be taken or made under this Act may be made before the judge or clerk of any court, a justice of the peace, a commissioner for oaths or a notary public.

[R.S.A. 1970, c. 297, s. 67]

Demand for rent

68. Notwithstanding the provisions of any disposition, the demand or acceptance of rent payable under a disposition is not a waiver of the right of the Minister to enforce the observance of any provision of the disposition, the regulations or this Act, or of the right to cancel the disposition under this Act for any default or breach committed before the rent is demanded or accepted.

[R.S.A. 1970, c. 297, s. 68]

PART 2

DISPOSITIONS NOT LEADING TO TITLE

Definitions

69. In this Part,

(*a*) "lease" means any disposition other than a disposition under which the holder may become entitled to an estate in fee simple, but includes a disposition containing an option to purchase the lands to the extent that its provisions do not pertain to the option;

(*b*) "lessee" means the holder of a lease.

[R.S.A. 1970, c. 297, s. 69]

Refusal to issue lease

70. The Minister may refuse to issue a lease or a renewal lease and may refund moneys paid in connection with any lease. [R.S.A. 1970, c. 297, s. 70]

Age of applicant

71. Unless otherwise provided in the regulations, no person is eligible to apply for a lease until he has attained the age of eighteen years. [R.S.A. 1970, c. 297, s. 71]

Liability of lessees

72. Where a lease is held by two or more persons, the lessees are jointly and severally liable for the performance of all of the lessee's obligations under the lease, the regulations and this Act regardless of the nature of their tenure under the lease. [R.S.A. 1970, c. 297, s. 72]

Protection of lessees

73. When the Minister authorizes any person to enter upon public land contained in a lease or withdraws any land from the lease, he may prescribe the conditions which in his opinion must be met for the protection of the lessee's interest. [R.S.A. 1970, c. 297, s. 73]

Use of land

74. A lessee shall not make use of the land for any purpose other than that for which the lease was granted without the consent of the Minister, and then only on such terms and conditions as the Minister may prescribe.

[R.S.A. 1970, c. 297, s. 74]

Use of cordwood and timber

75. (1) Every lessee who prepares land contained in his lease for cultivation may use cordwood for fuel and timber for the construction of buildings and improvements on the leased land without a permit.

(2) Except as permitted by subsection (1), no lessee shall cut timber on land contained in his lease for any purpose without the authority of a permit issued pursuant to the regulations under *The Forests Act, 1971*.

[R.S.A. 1970, c. 297, s. 75; 1971, c. 37, s. 53 (2)]

Exemption from rent payment

76. The Minister may exempt a lessee from the payment of any portion of his rent for a period not exceeding three crop years following the date of issue of the lease in any case where the lands contained in the lease

(*a*) are infested with noxious weeds, or

(*b*) have partly reverted to their natural state, or

(*c*) require extensive clearing or excessive costs for land preparation before cultivation can be commenced. [R.S.A. 1970, c. 297, s. 76]

Title to crops

77. The title in and to all crops of every nature and description grown and produced on any public land held under lease is and remains in the Crown until the crops are divided and the Crown's share is delivered pursuant to the lease. [R.S.A. 1970, c. 297, s. 77]

Cancellation of lease

78. (1) The Minister may cancel a lease when he is satisfied that

(*a*) the leased land is not being used for the purpose for which it is leased, or

(*b*) where land is leased to two or more persons, one or more of them has ceased to use the land for the purpose for which it is leased, or

(*c*) the lease was issued in error, or

(*d*) the lease or the land described therein is not held by the lessee for his sole use and benefit, or

(*e*) the lessee was ineligible to apply for or acquire the lease or is ineligible to hold it, or

(*f*) the lessee has failed to pay the rent, or any taxes, rates or assessments levied against his interest under the lease or any other money payable under the lease when it is due.

(2) Except as otherwise provided in the regulations, when the Minister cancels a lease pursuant to subsection (1), all payments made to the Crown in connection therewith are forfeited and the lessee is not entitled to any compensation for any work performed on the leased land or for any expenditure made by him in respect of or incidental to his use of it.

(3) When a lease is cancelled, any unpaid rent may be recovered as a debt owing to the Crown.
[R.S.A. 1970, c. 297, s. 78]

Withdrawal from lease

79. (1) One month after the date upon which the Minister mails a notice in writing to the last known address of the lessee, he may cancel a lease or withdraw any part of the land contained in a lease

(*a*) where, except in the case of a lease conveying rights to sand, gravel, clay or marl, he is satisfied that the land contained in the lease or to be withdrawn from it contains sand, gravel, marl or clay in commercial quantities, or

(*b*) where the land contained in the lease or to be withdrawn from it is to be subdivided or made the subject of a disposition that will authorize its use for industrial or commercial purposes, or

(*c*) where the land contained in the lease or to be withdrawn from it is to be designated as a park pursuant to *The Provincial Parks Act* or added to a park designated under that Act or its predecessors, or is to be set aside as a public resort or recreation area, or

(*d*) where the land contained in the lease or to be withdrawn from it is, in the opinion of the Minister, irrigable in whole or in part, or

(*e*) where the land contained in the lease or to be withdrawn from it is required to provide public access to a public resort or recreation area or to a river, stream, watercourse, lake or other body of water.

(2) When the Minister withdraws land pursuant to subsection (1) he may reduce the rent reserved in the lease by an amount in direct proportion to the area of land withdrawn.

(3) When the Minister cancels a lease or withdraws land from a lease pursuant to subsection (1) he may pay to the lessee such amount to which the lessee, in the opinion of the Minister, is entitled by way of compensation.

[R.S.A. 1970, c. 297, s. 79]

PART 3

HOMESTEAD SALES

Definitions

80. In this Part,

(*a*) "arable land" means land which, in the opinion of the Minister, is suitable for cultivation;

(*b*) "purchaser" means the holder of a homestead sale.

[R.S.A. 1970, c. 297, s. 80]

Application of Part 3

81. (1) This Part applies only to homestead sales issued as a result of applications received on or after the twentieth day of April, 1964.

(2) Applications for homestead sales received by the Director before the twentieth day of April, 1964, shall be dealt with in accordance with the provisions of the former Act as they were immediately before that date.

(3) Except as provided in subsection (4), homestead sales entered into by the Minister

(*a*) before the twentieth day of April, 1964, or

(*b*) pursuant to an application dealt with pursuant to subsection (2),

are subject to the provisions of the former Act as they were immediately before the twentieth day of April, 1964.

(4) The Minister may treat the holder of a homestead sale referred to in subsection (3) as having complied with section 195, subsection (1), clause (*c*) of the former Act as it stood immediately before the twentieth day of April, 1964 if that purchaser proves in his application for notification that he has an area under cultivation equivalent to the area required to be under cultivation by the end of the fifth year of the term of his homestead sale.

[R.S.A. 1970, c. 297, s. 81]

Homestead sales

82. (1) The Minister may in accordance with this Part, agree to sell parcels of public lands classified by him as available for settlement.

(2) An agreement to sell public lands pursuant to this Part shall be called a homestead sale.

(3) A homestead sale

(*a*) subject to clause (*b*), shall contain adjoining lands not exceeding four quarter-sections in area if at least one-half or more of the area is arable, and

(*b*) may contain one quarter-section in area of adjoining lands, or less, if the area contains eighty acres or more of arable land.

(4) A homestead sale issued during the first six months in any year is effective as of the first day of January in that year.

(5) A homestead sale issued during the last six months in any year is effective on the first day of January in the following year. [R.S.A. 1970, c. 297, s. 82]

Applications for Homestead Sales

Eligibility of applicant

83. (1) Every person who

(*a*) is a veteran or has resided in the Province for an aggregate total of one year within the three years prior to the date he applies for a homestead sale,

(*b*) has attained the age of eighteen years and who has not attained the age of seventy-one years, and

(*c*) is a Canadian citizen,

may apply for a homestead sale unless he is ineligible to do so by reason of subsection (2).

(2) Every person who complies with subsection (1) and who

(*a*) is the registered owner or whose spouse is the registered owner of a farm, either solely or jointly with any other person, or

(*b*) is in possession or control of a farm or whose spouse is in possession or control of a farm pursuant to an agreement for sale, or

(*c*) is a shareholder or whose spouse is a shareholder in a corporation that is either

(i) the registered owner of a farm, or

(ii) in possession or control of a farm pursuant to an agreement for sale,

is eligible to apply for a homestead sale only if the public land applied for, combined with

(*d*) the land so owned, possessed or controlled by the applicant and by the spouse of the applicant, and

(*e*) an area of land that bears the same proportion to the area of all land owned, possessed or controlled by the corporation as the number of shares in the corporation held by the applicant and his spouse bears to the total number of issued shares in the corporation,

does not exceed four quarter-sections.

(3) Subject to subsection (2), a purchaser may apply to purchase additional public land which is, in relation to the public land contained in his homestead sale, adjoining land.

(4) Subject to subsection (2) the spouse of a purchaser of a homestead sale may apply for a homestead sale.

(5) No person may apply for a homestead sale pursuant to subsection (2) or (4) unless the public land described in the application is situated, in the opinion of the Minister, within a radius of ten miles exclusive of statutory road allowances from the other land referred to in those subsections. [R.S.A. 1970, c. 297, s. 83; 1973, c. 49, s. 3]

Application for homestead sales

84. (1) An application for a homestead sale shall be made in person during regular office hours at

(*a*) the public lands office of the Department in Edmonton, or

(*b*) the office of a sub-agent, or

(*c*) such other places as may be authorized by the Minister.

(2) The Director shall consider all applications in the order they are received at the public lands office of the Department in Edmonton.

(3) Where an application is made at the office of a sub-agent or such other place as the Minister may authorize, the application has no effect until it is received at the public lands office of the Department in Edmonton.

(4) Notwithstanding subsection (3), where an application is made at the office of a sub-agent or such other place as the Minister may authorize, the sub-agent may at the expense of the applicant inform the Director of the application and the Director may at the expense of the applicant acknowledge the application by a reply.

(5) Where subsection (4) applies, the application shall be deemed to have been received at the public lands office of the Department in Edmonton at the time of the receipt of the information from the sub-agent.
[R.S.A. 1970, c. 297, s. 84]

Application deposit

85. (1) Every application to purchase shall be accompanied by a deposit in an amount fixed by the Lieutenant Governor in Council for each quarter-section or fractional quarter-section of land applied for.

(2) Where the Minister enters into a homestead sale the deposit paid by the purchaser shall be applied on account of the payment of the purchase price.
[R.S.A. 1970, c. 297, s. 85]

Purchase Price and Cultivation Duties

Purchase price

86. (1) The price of public land sold pursuant to this Part shall be determined by the Minister who may for this purpose consider

(*a*) the value of the public land determined by an officer of the Department who has inspected it,

(*b*) the duties to be performed by the purchaser, and

(*c*) the cost of constructing any works or improvements required to provide access to or facilitate the settlement of the land.

(2) The purchase price is payable by the purchaser in equal consecutive annual instalments commencing with

(*a*) the fourth year, where less than twenty-five acres of land are under cultivation, or

(*b*) the third year, where not more than fifty and not less than twenty-five acres of land are under cultivation, or

(*c*) the second year, where more than fifty acres of land are under cultivation,

at the time the homestead sale is executed.

(3) The purchase price shall, in the discretion of the Minister, be divided into instalments of not more than nineteen in number.

(4) Every instalment of purchase price is due and payable on the first day of January in the year in which it is due.

(5) Interest on the purchase price does not begin to accrue until the first instalment is due.

(6) Any money paid by a purchaser under a homestead sale shall be applied to the payment of any interest that is owing, before any money is applied toward payment of the purchase price.

(7) Any or all of the instalments of purchase price may be paid before they are due. [R.S.A. 1970, c. 297, s. 86]

Cultivation duties

87. (1) A purchaser of a homestead sale of land not exceeding one quarter-section shall break and seed to crop not less than the following areas in each year:

	Break	*Seed to crop*
First year	10 acres	nil acres
Second year	10 acres	10 acres
Third year	10 acres	20 acres
Fourth year	10 acres	30 acres
Fifth year		40 acres
Sixth year		40 acres
Seventh year	10 acres	40 acres

Eighth year	10 acres	50 acres
Ninth year		60 acres
Each year thereafter		60 acres

(2) For the purposes of subsection (1),

(*a*) any land under cultivation at the time the homestead sale is issued shall be deemed to be land broken by the purchaser, and

(*b*) summerfallow, unseeded cultivated land or land seeded to tame hay or grass shall, where authorized by the Director, be deemed to be land seeded to crop.

(3) Where a homestead sale contains land exceeding one quarter-section, the acreage to be broken and seeded to crop shall bear the same proportion to the total acreage as the acreages set out in subsection (1) bear to one quarter-section.

(4) Notwithstanding the failure of the purchaser to perform his residence in any year, the cultivation he completes pursuant to this section for that year shall be credited to him. [R.S.A. 1970, c. 297, s. 87]

Residence requirements

88. (1) Every purchaser shall reside

(*a*) on the land described in his homestead sale, or

(*b*) on land in the vicinity,

as required by subsection (3), for a total of at least three months in each year of the term of the sale commencing not later than the first day of July in the seventh year of the term.

(2) Subject to section 101, a notification may be issued to a purchaser before the completion of the term of his sale if he resides

(*a*) on the land described in his homestead sale, or

(*b*) on land in the vicinity,

as required by subsection (3), for a total of twelve months in two or more years commencing

(*c*) at any time after the date of issue of the homestead sale, where it is issued during the first six months of the year, or

(*d*) at any time after the effective date of the homestead sale, where it is issued during the last six months of the year,

if the residence periods total not less than three months in any one year.

(3) The purchaser shall reside in a habitable house situated on the land contained in the homestead sale or on a farm having an area of at least eighty acres that is, in the opinion of the Minister, situated within a radius of ten miles, exclusive of statutory road allowances, from the land contained in the homestead sale.

(4) For the purpose of this section one month shall be deemed to be a period of thirty consecutive days.

(5) Residence by the family in the absence of the purchaser shall not be counted towards fulfilment of the residence requirements.

(6) For the purpose of determining whether a homestead purchaser has complied with the residence requirements under this section or under the former Act, no period of residence shall be excluded for the reason only that the homestead purchaser was not chiefly engaged in farming during the period of residence.

(7) Residence duties performed in any year in accordance with this section count to the credit of the purchaser even though the purchaser fails to comply with the cultivation requirements in the same year. [R.S.A. 1970, c. 297, s. 88]

Extension of time

89. The Minister may grant extensions of time to the purchaser for the performance of the terms and conditions of the homestead sale. [R.S.A. 1970, c. 297, s. 89]

Exemption from taxation

90. No land contained in a homestead sale is liable to taxation under any Act authorizing the taxation of a purchaser's interest under a homestead sale until

(*a*) the fourth year, where less than twenty-five acres of land are under cultivation, or

(*b*) the third year, where not more than fifty and not less than twenty-five acres of land are under cultivation, or

(*c*) the second year, where not more than one hundred but more than fifty acres of land are under cultivation, or

(*d*) the first year, where more than one hundred acres of land are under cultivation,

on the day the homestead sale is issued.
[R.S.A. 1970, c. 297, s. 90]

Substitutional Homestead Sales

Substitutional homestead sales

91. (1) Subject to section 83, the purchaser of a homestead sale may apply to the Minister to cancel the homestead sale and enter into a new homestead sale containing all or part of the same land.

(2) Subject to section 83, an application under this section may include land other than land contained in the homestead sale.

(3) Where an application is made under this section, the Minister shall prescribe the conditions with respect to

(*a*) repayment of any loan under *The Homestead Lease Loan Act*,

(*b*) transfer of any moneys paid as principal on account of the purchase price under the cancelled homestead sale, and

(*c*) the addition of any moneys due as interest under the cancelled sale to the purchase price of the new sale.

(4) The value of the land contained in the cancelled homestead sale and included in the new homestead sale shall be the value established at the time of issue of the cancelled homestead sale or as nearly as it can be ascertained.

(5) Where a new homestead sale is granted pursuant to this section, the purchaser shall be in the same position with respect to payments of instalments of purchase price, the performance of residence duties and exemption from taxation as he would be if the date of the new homestead sale were the same as the date of the cancelled homestead sale. [R.S.A. 1970, c. 297, s. 91]

Homestead Sales in Substitution for Homestead Leases

Homestead sales in substitution for homestead leases

92. (1) Upon payment of the deposit referred to in section 85, subsection (1), the holder of a homestead lease may apply to the Minister to cancel the lease and enter into a homestead sale containing all or part of the same land.

(2) No application may be made under this section by a homestead lessee who is, at the time of applying, seventy-one years of age or older.

(3) An application under this section may include land other than the land contained in the homestead lease and in that case the eligibility of the applicant shall be determined by section 83.

(4) Where a homestead lessee applies under this section to obtain a homestead sale the Minister shall prescribe the conditions to be met with respect to

(*a*) repayment of any loan under *The Homestead Lease Loan Act*,

(*b*) the proportion of rent paid in connection with the homestead lease to be credited toward payment of the purchase price under the homestead sale,

(*c*) the transfer of credit for cultivation duties,

(*d*) the dates when instalments of purchase price become payable, and

(*e*) any other conditions relevant to the issue of the homestead sale.

(5) The value of the land contained in the homestead lease and included in the homestead sale shall be the value established at the time of issue of the homestead lease or as nearly as it can be ascertained.

(6) Residence duties performed under the cancelled homestead lease shall not be credited to the purchaser under a homestead sale issued pursuant to this section.

(7) When a homestead sale is granted pursuant to this section the purchaser shall be in the same position with respect to exemption from taxation as he would be if the date of the homestead sale were the same as the date of the cancelled homestead lease. [R.S.A. 1970, c. 297, s. 92]

Obligations of purchaser

93. (1) Where a homestead sale is issued in substitution for a homestead lease, the purchaser is in the same position with respect to the commencement of payments of instalments under section 86, subsection (2) as he would be if the date of issue of the homestead sale were the same as the date of the commencement of the term of the cancelled homestead lease.

(2) Where a homestead lessee makes an application pursuant to section 92 during the fourth or any subsequent year of the term of the homestead lease, the Minister shall determine whether the first instalment under the homestead sale shall be paid

(*a*) on or before the date of issue of the homestead sale or on the first day of January in the next succeeding year, where the homestead sale is issued on or before the thirtieth day of June, or

(*b*) on the first day of January in the next succeeding year, or on the first day of January in the second succeeding year, where the homestead sale is issued on or after the first day of July.

[R.S.A. 1970, c. 297, s. 93]

Cancellation

Cancellation of homestead sale

94. The Minister may cancel a homestead sale where the purchaser

(*a*) has not performed or misrepresents the performance of his residence or cultivation duties, or

(*b*) is more than two years in arrears in the payment of taxes against his homestead sale, or

(*c*) neglects or refuses to pay for any improvements that were inadvertently not paid for at the time the homestead sale was issued, or

(*d*) purports to transfer, assign, mortgage, encumber, charge or otherwise dispose of his interest under the homestead sale prior to the issue of a notification with respect to the land described therein, without the consent of the Minister, or

(*e*) sells or otherwise disposes of improvements created or chattels purchased with financial assistance obtained under the *Veterans' Land Act* (Canada), or

(*f*) fails to comply with the terms and conditions of his contract for a loan under *The Homestead Lease Loan Act*, or

(*g*) does not personally occupy and operate the land contained in the homestead sale or permits or agrees to permit any person other than his employee to use, occupy or operate any part of the land, or

(*h*) acquired the homestead sale in substitution for a homestead lease that was acquired by him in error or through fraud, misrepresentation, personation or improvidence. [R.S.A. 1970, c. 297, s. 94]

Compensation and refunds after cancellation

95. Where a homestead sale is cancelled, the debt of the purchaser for the unpaid balance of the purchase price and interest is extinguished and the Minister may

(*a*) pay or refuse to pay to the purchaser any moneys as compensation for improvements created by the purchaser on the land described in the homestead sale, and

(*b*) refund or refuse to refund all or any portion of the moneys paid on account of the purchase price and interest. [R.S.A. 1970, c. 297, s. 95]

Relief from cancellation

96. (1) Except as hereinafter provided in this section, the Minister shall not cancel a homestead sale by reason of a default by a purchaser in the performance of his cultivation and residence duties or in the payment of the purchase price or interest where the default occurred

(*a*) during the purchaser's last illness leading up to his death, or

(*b*) after the purchaser's death, or

(*c*) after the purchaser became mentally incapacitated, if it appears to the Minister that the default by reason of which the homestead sale might otherwise have been cancelled was attributable to his mental incapacity.

(2) The Minister may limit the time during which subsection (1) applies and may from time to time and as he considers necessary extend such period of time.

(3) No time limit or extensions thereof shall be made beyond three years from the date of death of a purchaser or the date of the appointment of his personal representative, whichever is sooner.

(4) Where the Minister sets a time limit pursuant to subsection (2) or allows an extension thereof, he shall serve a notice to that effect by mail upon

(*a*) the personal representative, in the case of a deceased purchaser, or

(*b*) a member of the next-of-kin of a deceased purchaser, where no personal representative has been appointed, or

(*c*) the administrator of the estate of a mentally incapacitated purchaser.

(5) Upon the expiration of the time limit referred to in subsection (2) or any extensions thereof, subsection (1) no longer applies to the homestead sale.

[R.S.A. 1970, c. 297, s. 96]

Assignments

97. Notwithstanding section 100, clause (*a*), the Minister may consent to an assignment of a homestead sale made earlier than in the fifth year where the assignment is made by the personal representative of a deceased purchaser or the administrator of the estate of a mentally incapacitated purchaser. [R.S.A. 1970, c. 297, s. 97]

Postponement of obligations

98. The Minister, upon being satisfied that the physical or mental condition of the purchaser is or was such as to incapacitate him, may postpone

(*a*) the payment of any instalment or instalments of purchase price or of interest payable under a homestead sale, or

(*b*) the performance of all or part of his cultivation and residence duties during any period in which the purchaser is or was so incapacitated and for such further period as the Minister considers just.

[R.S.A. 1970, c. 297, s. 98]

Sale of homestead sale

99. The Minister may sell the lands contained in a homestead sale upon such terms and conditions as he may prescribe to

(*a*) a purchaser who, in the Minister's opinion, has faithfully and to the best of his ability endeavoured to perform his obligations under the homestead sale but from some unpreventable cause or mental or physical incapacity or through some technicality has failed in doing so and yet has an equitable claim entitling him to favourable consideration, or

(*b*) a former purchaser whose homestead sale has been cancelled on the ground that he was ineligible to acquire the homestead sale or the homestead lease for which it was substituted.

[R.S.A. 1970, c. 297, s. 99]

Assignments

Assignments

100. (1) A purchaser may, with the consent of the Minister, assign his homestead sale, but the Minister shall not consent to an assignment

(*a*) unless the assignor can be credited with the performance of cultivation duties equivalent to the cultivation duties prescribed for the first two years, or

(*b*) unless the assignor has paid the instalments due and owing on the purchase price, or

(*c*) unless the assignee is 18 years of age or older, or

(*d*) subject to clause (*c*), unless the assignee is a person who would be eligible to become a purchaser upon his own application therefor, or

(*e*) where the purchaser is indebted in respect of financial assistance received by him under the *Veterans' Land Act* (Canada), or

(*f*) where the purchaser has not repaid in full any moneys owing by him under a loan made pursuant to *The Homestead Lease Loan Act.*

(2) Notwithstanding any provisions of this Act or the regulations the Minister may, upon such terms and conditions as he may prescribe, consent to an assignment of a homestead sale or a homestead lease when the Minister is satisfied that the assignment is essential to creating a farm unit which has the potential of being developed as an economic enterprise. [R.S.A. 1970, c. 297, s. 100]

Application for Title

Application for title

101. (1) A notification may be issued for land contained in a homestead sale to a purchaser who

(*a*) submits an application containing information satisfactory to the Minister,

(*b*) has paid the purchase price or is entitled to a credit pursuant to this section sufficient to pay the purchase price,

(*c*) has an area under cultivation equivalent to the area required to be under cultivation by the end of the fifth year of the term of the homestead sale,

(*d*) has performed a minimum of twelve months' residence as required by this Part,

(*e*) has repaid all money loaned to him pursuant to ***The*** *Homestead Lease Loan Act,*

(*f*) obtains the consent of The Director, The Veterans' Land Act where he owes any money advanced to him as financial assistance under the *Veterans' Land Act* (Canada),

(g) is a Canadian citizen, and

(*h*) has not fraudulently misrepresented any of the information contained in his application.

(2) Where the purchaser performs his residence in a habitable house worth, in the opinion of the Minister, at least one thousand dollars, constructed on a permanent foundation on the land contained in his homestead sale, and his application for notification is approved by the Minister, the Minister may grant to the purchaser a credit of two dollars per acre not exceeding the total sum of five hundred dollars and may

(*a*) apply all or any portion of the total sum in payment of any unpaid balance of the purchase price, or

(*b*) pay the total sum or any portion of it to the purchaser.

(3) Where a purchaser dies or is mentally incompetent and his application for notification is made by his personal representative or administrator, the personal representative or administrator is not required to prove that the deceased or mentally incompetent purchaser was or is a Canadian citizen or British subject.

[R.S.A. 1970, c. 297, s. 101; 1973, c. 49, s. 4]

Affidavits with application

102. (1) Every application made by a purchaser for a notification shall be supported by the affidavit of the purchaser verifying the information given in the application.

(2) Where the Minister so requires, the application shall be supported by affidavits of two persons residing in the vicinity of the land contained in the homestead sale verifying the information given by the purchaser in his application.

[R.S.A. 1970, c. 297, s. 102]

Miscellaneous

Improvements near road allowance

103. A purchaser shall not build or make any improvements of a permanent nature, other than fencing or cultivation, on any part of the land contained in a homestead sale that lies within one rod of a statutory road allowance.

[R.S.A. 1970, c. 297, s. 103]

Use of land

104. No purchaser shall use the land contained in a homestead sale other than as a farm and a place of residence, except with the consent of the Minister and then only on such terms and conditions as the Minister may prescribe.

[R.S.A. 1970, c. 297, s. 104]

Timber cutting

105. Section 75 applies, with the necessary changes, to homestead sales and the purchasers holding them.

[R.S.A. 1970, c. 297, s. 105]

PART 4

GRAZING LEASES

Grazing lease

106. (1) The Minister may in accordance with this Part lease public land for a term not exceeding twenty years for the purpose of grazing livestock when, in the Minister's opinion, the best use that may be made of the land is the grazing of livestock.

(2) A lease under this Part shall be called a grazing lease.

(3) The area of land leased under this Part shall not exceed an area sufficient to graze six hundred head of cattle, unless, in the opinion of the Minister, a larger area can be leased without adversely affecting the interests of other farmers or ranchers residing in the vicinity of the leased land.

[R.S.A. 1970, c. 297, s. 106]

Annual rent

107. (1) The rent payable under a grazing lease shall be

(*a*) an annual rent equal to such percentage as may be established by the Lieutenant Governor in Council of the forage value of the leased land, and

(*b*) any additional annual rent prescribed by the Minister in respect of cultivated land.

(2) The forage value of the land contained in a grazing lease shall be fixed annually by the Minister who shall for this purpose consider

(*a*) the grazing capacity of the land,

(*b*) the average gain in weight of cattle on grass, and

(*c*) the average sale price per pound of cattle, other than choice grades and fed calves, sold in the Calgary livestock market during the preceding calendar year, or the portion thereof selected by the Minister.

(3) Notwithstanding the date from which the term of any grazing lease is computed, the rent is payable for each calendar year or portion thereof included in the term of the lease on or before

(*a*) the first day of July in each year if the lessee is a grazing association, or

(*b*) the first day of April in each year if the lessee is not a grazing association.

[R.S.A. 1970, c. 297, s. 107]

Grazing capacity of land

108. (1) The Minister may establish from time to time the grazing capacity of all grazing lands in the Province and for this purpose may

(*a*) divide the Province into districts,

(*b*) establish the grazing capacity of grazing lands in each district, and

(*c*) establish the grazing capacity of grazing lands held under a grazing lease either above or below the grazing capacity of other grazing lands in the district in which the leased lands are situated.

(2) If the Minister does not establish the grazing capacity of land held under a particular grazing lease, the grazing capacity of that land shall be the same as the grazing capacity established for the district in which that land is situated.

(3) A cow of average weight with calf at foot shall be considered as one animal unit for the purpose of establishing the grazing capacity of grazing lands, and any variations in the proportions of an animal unit due to age, weight and type of livestock shall be determined by the Minister.

[R.S.A. 1970, c. 297, s. 108; 1971, c. 96, s. 10 (b)]

Grazing leases

109. (1) Where a grazing lease is held by a grazing association, the land contained in the lease shall be used for the benefit of its members who are operating farms in the vicinity, if they qualify for grazing privileges under the by-laws of the association.

(2) Notwithstanding subsection (1), where a grazing lease is held by a grazing association and any person having a farm in the vicinity of the lands contained in the lease has been refused membership in, or has been dismissed from the membership of, the association, the Minister may, after considering the complaint of that person and the representations of the association,

(*a*) request the association to accept or reinstate that person as a member, as the case may be, and

(*b*) if the association refuses to do so, order the association to allow the stock of that person to graze on the leased lands on the same terms that the association prescribes for its members.

(3) Where a grazing lease is held by a grazing association and any member of the association has been allotted more than twenty animal units for the grazing season, the Minister may require the grazing association

(*a*) to reduce the allotment of such a member to a minimum of twenty animal units in subsequent years, and

(*b*) to issue allotments to other persons operating farms in the vicinity of the grazing lease.

(4) Where a grazing lessee is a grazing association, the association shall maintain a membership of at least five persons none of whom is the spouse of any of them.

[R.S.A. 1970, c. 297, s. 109]

Residence

110. (1) The Minister may grant an ancillary lease to a grazing lessee of a parcel of public land not exceeding one quarter-section in area on which the lessee may reside and erect the buildings he requires to conduct his operations.

(2) The term of any lease granted pursuant to subsection (1) commences and expires on the same dates that the term of the lessee's grazing lease commences and expires, and if the grazing lease is cancelled the ancillary lease is thereby terminated. [R.S.A. 1970, c. 297, s. 110]

Community grazing reserve

111. When the Minister is satisfied that the interests of the farmers or ranchers in any area of the Province demand it, he may establish, maintain and operate a community grazing reserve. [R.S.A. 1970, c. 297, s. 111]

Regulations

112. The Lieutenant Governor in Council may make regulations

(*a*) governing applications for grazing leases and the eligibility of applicants for grazing leases,

(*b*) varying the requirements of section 56 as to applicants for grazing leases,

(*c*) prescribing the rights and obligations of grazing lessees in relation to the use and occupation of the lands held by them under grazing leases,

(*d*) authorizing the Minister to prescribe additional rent payable by grazing lessees in respect of cultivated land contained in their grazing leases,

(*e*) prescribing the terms and conditions upon which grazing lessees may conduct range improvement projects on the lands contained in their grazing leases and authorizing the exemption from the payment of rent under those grazing leases for the periods and upon the terms and conditions prescribed in the regulations,

(*f*) varying, making inapplicable, or authorizing the waiver of compliance with, any of the provisions of Part 2,

(*g*) prescribing the circumstances under which the Minister shall refuse to consent to an assignment of a grazing lease and governing any other matter that relates to the assignment of grazing leases,

(*h*) providing, as to any provision in the regulations, that its contravention constitutes an offence, and

(*i*) generally, providing for any other matter pertaining to grazing leases or grazing lessees.

[R.S.A. 1970, c. 297, s. 112]

Withdrawals from grazing leases

113. (1) One year after the date upon which the Minister mails a notice in writing to the last known address of the grazing lessee stating his intention to do so, the Minister may, without compensation, withdraw from

(*a*) a grazing lease issued to or validly assigned to the the grazing lessee prior to the first day of May, 1959, the land the Minister may select for the purpose of reducing the area of land held by the grazing lessee under that lease and any other lands referred to in

subsection (2) to an area of land sufficient to graze one thousand animal units for a calendar year in accordance with its grazing capacity, or

(*b*) a grazing lease issued to or validly assigned to the grazing lessee on or after the first day of May, 1959, the land the Minister may select for the purpose of reducing the area of land held by the grazing lessee under that lease and any other lands referred to in subsection (2) to an area of land sufficient to graze six hundred animal units for a calendar year in accordance with its grazing capacity.

(2) The Minister may determine the area of land greater than that which is sufficient to graze one thousand or six hundred animal units, as the case may be, pursuant to subsection (1), and for this purpose may include

(*a*) any area of land held by the grazing lessee or his spouse or both under a grazing lease other than that from which the withdrawal is to be made,

(*b*) any area of land held by the grazing lessee or his spouse or both under a grazing lease within a special area,

(*c*) where the lessee or his spouse or both hold jointly with any other person land under a grazing lease, including land within a special area, an area that bears the same proportion to the total area of land held under the lease that the lessee or his spouse or both bears to the total number of the joint lessees including himself or his spouse or both of them, and

(*d*) where the lessee or his spouse or both hold shares in a corporation that holds land under a grazing lease, including land within a special area, an area that bears the same proportion to the total area of land held by the corporation under the grazing lease, that the number of shares held by the lessee or his spouse or both in that corporation bears to the total number of existing shares in the corporation.

(3) Where the grazing lease is held by a corporation (in this subsection called the "lessee corporation"), the Minister may, for the purposes of subsection (2),

(*a*) treat the person or persons holding all or a majority of the shares of the lessee corporation as being the lessee,

(*b*) in case any such shareholder is itself a corporation, treat the persons holding all the shares of that second corporation as being the holders of that second corporation's shares in the lessee corporation, and

(*c*) in case any shareholder of the second corporation is itself a corporation, treat the persons holding all the shares of that third corporation as being the holders of that third corporation's shares in the second corporation,

and so on, until all the natural persons having an interest in the lessee corporation have been determined.

[R.S.A. 1970, c. 297, s. 113]

Cancellation or withdrawal after assignment refusal

114. (1) Where the Minister refuses his consent to an assignment of a grazing lease he may

(*a*) cancel the lease, or

(*b*) withdraw any lands from the lease,

upon giving the lessee one year's notice in writing to that effect.

(2) Where a grazing lessee to whom a notice has been given pursuant to subsection (1) makes an assignment of his lease to a person other than the person named as the assignee in the assignment to which the Minister refused his consent, and the Minister consents to the subsequent assignment, the notice given pursuant to subsection (1) shall be deemed to be withdrawn.

[R.S.A. 1970, c. 297, s. 114]

Grazing lease of deceased lessee

115. (1) Where the holder of a grazing lease dies or has died and the personal representative of his estate does not obtain or has not obtained, within two years of the date of death of the lessee, the consent of the Minister to an assignment of the grazing lease, the Minister may give notice to the personal representative to submit to him an assignment of the grazing lease within the time specified in the notice.

(2) The Minister from time to time may extend the time specified in the notice referred to in subsection (1).

(3) Where a notice has been given pursuant to subsection (1), the submission by the personal representative of an assignment of a grazing lease

(*a*) which the Minister may properly refuse for registration pursuant to Part 5, or

(*b*) which is made under circumstances prescribed by the regulations under this Part as circumstances under which the Minister is required to refuse his consent to the assignment,

is not a compliance with the notice.

(4) Where the personal representative does not comply with a notice given to him pursuant to subsection (1), the Minister may cancel the grazing lease.

[R.S.A. 1970, c. 297, s. 115]

Proof by corporate lessee

116. (1) Where any corporation is the holder of a grazing lease, the Minister at any time by notice in writing may require the lessee to furnish proof that at the time of the notice

(*a*) it is incorporated under the laws of Canada or of Alberta, and

(*b*) the majority of its shares are owned by residents of the Province for their exclusive use and benefit

and not in the interests of or for the benefit of any other person,

and, if the Minister should so desire, to furnish proof that the *de facto* control of the lessee company is in the persons resident in the Province who own the major part of the shares of such company.

(2) If the lessee fails to comply with the notice or if the proof furnished by the lessee is not satisfactory to the Minister, the Minister may cancel the lease.

[R.S.A. 1970, c. 297, s. 116]

Change in corporate ownership

117. (1) The Minister may require a corporation that holds a grazing lease to file a statement certified by an officer or director of the corporation showing the names, addresses and number of shares held by each of the shareholders at the time the grazing lease is issued or at any time during its term.

(2) Where a corporation holds a grazing lease and by the transfer of shares or by the allotment of new shares, or both, the majority of its shares at any time become vested in persons other than those persons who held the majority of its shares prior to such transfer or allotment, the Minister may

(*a*) cancel the grazing lease if he considers it in the public interest to do so, or

(*b*) require the corporation to pay a sum equivalent to the assignment fee that it would be required to pay by the regulations if the grazing lease had been assigned by it to another person.

[R.S.A. 1970, c. 297, s. 117; 1971, c. 96, s. 10 (c); 1972, c. 89, s. 17]

PART 5

REGISTRATION OF ASSIGNMENTS

Definitions

118. In this Part,

(*a*) "assignment" includes transfer;

(*b*) "disposition" includes any lease, permit or licence, or any instrument granting an estate or interest in public lands and made pursuant to

(i) *The Forests Act, 1971* or its predecessors, or

(ii) *The Provincial Parks Act* or its predecessors;

(*c*) "registration" or "register" means

(i) the entering in a book authorized by the Minister for that purpose of an assignment, and

(ii) the endorsing on or attaching to the disposition affected of a memorandum evidencing an entry under subclause (i).

[R.S.A. 1970, c. 297, s. 118; 1971, c. 37, s. 53 (2)]

Registration of assignment

119. (1) An assignment of a disposition that the holder is not prohibited from assigning by any provision of any Act or regulation or of the disposition itself may be registered by the Minister.

(2) The Minister shall cause to be kept in the Department books for the registration of assignments.

(3) The Minister may refuse to register an assignment unless

(*a*) the assignment, other than an assignment of a mineral surface lease is unconditional,

(*b*) all of the persons to whom the disposition was made are the assignors under the assignment,

(*c*) the assignment is executed in a manner satisfactory to the Minister and accompanied by proof of execution satisfactory to the Minister,

(*d*) the assignment is in a form satisfactory to the Minister, and

(*e*) the prescribed fee is paid.

(4) Where an assignment is executed by an attorney or agent, proof of the authority of the attorney or agent, in a form satisfactory to the Minister, shall be submitted to the Department.

(5) Before an assignment may be registered the holder's copy of the disposition or a true copy thereof shall be submitted to the Department.

[R.S.A. 1970, c. 297, s. 119]

Effect of registration of assignment

120. (1) Notwithstanding anything contained in an assignment, but subject to this section, the interest of an assignor in a disposition ceases and determines upon registration of an assignment of the disposition and the assignee thereupon becomes the holder of the disposition.

(2) An assignment registered under this Part is valid against and takes priority over any unregistered assignment.

(3) In so far as an assignment affects the Crown, the assignment shall be deemed to take effect from the time of its registration. [R.S.A. 1970, c. 297, s. 120]

Assignments where holder assignor and assignee

121. (1) An assignor may assign a disposition to himself and another person or persons and upon registration of the assignment is entitled to the interest that the assignment purports to convey to him to the same extent as if he were not the assignor.

(2) Two or more persons, being the holders of a disposition may assign the disposition to one or more of them, who upon registration of the assignment are entitled to the interest that the assignment purports to convey to him or them to the same extent as if he or they were not the assignors. [R.S.A. 1970, c. 297, s. 121]

Registration deemed to confer consent

122. (1) Where an Act or regulation or a provision of a disposition prohibits an assignment of the disposition except with the consent of the Minister, the consent of the Minister shall be deemed to be given by the registration of the assignment under this Part.

(2) Nothing in this Part abrogates or restricts the right of the Minister to refuse his consent to an assignment. [R.S.A. 1970, c. 297, s. 122]

PART 6

HOMESTEAD LEASES UNDER FORMER ACT

Homestead leases

123. (1) Homestead leases granted by the Minister before April 20, 1964 or pursuant to an application received by him before April 20, 1964, are subject to the provisions of the former Act as it stood immediately before April 20, 1964 excepting the following provisions thereof:

(*a*) section 20, subsections (2) to (6) and (8);
(*b*) section 21, subsections (3) to (7);
(*c*) section 22, subsection (1);
(*d*) section 23, subsection (5);
(*e*) section 27;
(*f*) section 39, subsection (2);
(*g*) section 41, subsection (2);
(*h*) section 29, subsection (5);
(*i*) section 42, subsections (1), (2), (6), (7) and (8).

(2) Section 88, subsections (3), (5), (6) and (7) and section 100 of this Act apply with the necessary changes, to homestead leases and the lessees holding them. [R.S.A. 1970, c. 297, s. 123]

SCHEDULE

FORM A

(Sections 2 and 29)

DEPARTMENT OF LANDS AND FORESTS

THE PUBLIC LANDS ACT

NOTIFICATION FOR ISSUE OF CERTIFICATE OF TITLE

The Registrar,

.....Alberta Land Registration District,

....., Alberta.

The undernamed is entitled to the issue of a certificate of title in his favour for an estate in fee simple in the following land:

Description .....

Name .....

Address .....

Occupation .....

Nature of grant .....

Remarks .....

Date .....

Notification No. .....

....

Director of Lands *Deputy Minister of Lands and Forests*

[R.S.A. 1970, c. 297, Schedule, Form A]

FORM B

(Section 45 (2))

NOTICE OF SEIZURE

TO .....

.....

.....

TAKE NOTICE that pursuant to the authority given to me by an order of the Minister of Lands and Forests under section 45 of *The Public Lands Act,* a seizure has been made by me of the grain described as follows:

.....

.....

.....

.....

AND FURTHER TAKE NOTICE that this grain is being seized for the following reasons:

.....

.....

.....

.....

Further particulars and instructions may be obtained on application to .....

Dated this..... day of ....., 19.....

.....

An Officer of the Department of Lands and Forests

[R.S.A. 1970, c. 297, Schedule, Form B; 1971, c. 96, s. 10(d)]

INDEX

PUBLIC LANDS ACT
CHAPTER 297

Act
. application of ..... 3(1)
. . Part 3 81
. cancellation of disposition for non-compliance with ..... 25(1)(a)
. former, defined 2/7
. former, homestead leases subject to 123
. orders for carrying out of ..... 8(j)
. regulations for carrying out of ..... 10(i)

Action
. exemplary damages, for, by Crown ..... 51(3)

Adjoining lands
. defined 2/1

Administrator see **Personal representative**

Affidavits
. taking of 67

Age qualification
. applicant for homestead sale ..... 83(1)(b)
. applicant for substitutional homestead sale ..... 92(2)
. asignee of homestead sale ..... 100(1)(c,d)
. lessee, of 71

Agreements
. disposition, regulations re submission to Minister ..... 10(e)
. homestead sale—see **Homestead sale**
. settlement and rehabilitation of veterans ..... 8(h)
. transfer of land ..... 8(i)
. use of lands, re 21
. withdrawal of land, for ..... 24,25(2)

Alberta Natural Resources Act
. referred to 2/21

Application
. disposition, for ..... 14(b),15
. . regulations ..... 10(c)
. homestead sale, for 84,91
. . deposit with 85
. . eligibility 83
. . substitution for homestead lease, for 92
. payment for seized livestock, for ..... 59(8)
. reinstatement of disposition, for 27
. title to homestead, for 101,102

Arable land
. defined ..... 80(a)

PUBLIC LANDS ACT

Assignment
. defined ..... 118(a)
. disposition, of, regulations ..... 10(d)
. execution of 36
. homestead sale 97,100
. lands in disposition, consent to 42
. minors, by 41
. registration 118-122

Bidder
. interference with 54

Bird sanctuaries
. setting aside land for ..... 8(e)

Building see **Improvements**

Canada
. agreement to transfer land for National Park to ..... 8(i)
. agreements with, re settlement of veterans ..... 8(h)
. setting aside land for ..... 8(e)(i)
. transfer of control to ..... 8(g)

Canadian citizen
. applicant for homestead sale to be ..... 83(1)(c)
. purchaser to be 21.1
. title to homestead to ..... 101(1)(g)

Canadian Forces
. member, exemption to ..... 10(b)

Cancellation
. disposition, of ..... 25(1)
. . application of moneys collected for improvements 57
. . failure in execution, on ..... 38(2)
. . failure to pay survey costs in advance ..... 22(3)
. . procedure for 26
. . regulations re ..... 9(1)(e),(2)
. . request of holder, at ..... 24,25(2)
. erroneous notification ..... 32(1)
. grazing lease
. . assignment, on 114
. . change in corporate ownership ..... 117(2)
. . deceased lessee, of ..... 115(4)
. . default of proof of incorporation, etc. ..... 116(2)
. homestead sale 94-96
. lease, of 78

Cemetery
. grant of land for 19

Certificate of title
. defined 2/2
. issue upon notification 29

PUBLIC LANDS ACT

Chattels
. removal of 58

PUBLIC LANDS ACT

Church
. grant of land for 19

Classification
. public lands 12

Clay, marl, sand or gravel
. illegal removal of, seizure 49
. withdrawal of leased land for ..... 79(1)(a)

Clearing or breaking
. improvement, as ..... 56(5)

Commercial or industrial purposes
. withdrawal of land from lease for ..... 79(1)(b)

Community grazing reserve
. establishment 111

Community hall
. grant of land for 19

Compensation
. cancellation of homestead sale, upon 95
. withdrawal of land from lease, upon ..... 79(3)
. work, for, cancellation of lease not to entail ..... 78(2)

Confiscation
. improvements to Crown 58
. seized clay, marl, sand or gravel ..... 49(3)

Construction
. dispositions, of 37,40

Contract
. private, sale of public lands by ..... 18(a)

Conviction
. cancellation of disposition upon ..... 25(1)(c)

Co-operative Associations Act
. referred to ..... 57(b)

Corporation
. Canadian, defined ..... 21.1(3)(a)
. Crown, transfer of administration of public lands to ..... 8(f)
. execution of instruments by ..... 36(2)
. grazing lease to 113,116,117
. municipal, sale of public lands to ..... 8(b)
. purchaser of homestead sale, as 83

Costs
. prepayment of survey ..... 22(2,3)
. seizure of grain ..... 45(3)

Crop
. inspection of documents re handling of 65

PUBLIC LANDS ACT

. requirements from homesteader 87
. seizure of 45
. title to 77
. unlawfully planted 48

Crop share
. payment due on, refusal of notification 33
. seizure for rent 45

Crown
. action for exemplary damages by ..... 51(3)
. claims, as charge on public land 33
. forfeiture of chattels to ..... 58(4,5)
. land, equity in as part of price 17
. prescription not to be held against 5
. reservations ..... 18(d),34

Crown Cultivation Leases Act
. referred to ..... 64(3)

Cultivation
. duties of holder 60
. . exemption of incapacitated or deceased persons 96,98
. improvement, as ..... 56(3,4)

Danger to life or property
. conditions causing, prohibition ..... 51(1)(c)

Death
. notification on person's 31
. purchaser of homestead sale 96

Deceased persons see **Personal representative**

Defect
. notification, in, issue of new one 32

Definitions 2
. Canadian corporation ..... 21.1(3)(a)
. equity share ..... 21.1(3)(b)
. operator for surface reclamation ..... 11(4)
. Part 2, for 69
. Part 3, for 80
. Part 5, for 118

Department
. books for registration of assignments, keeping of ..... 119(2)
. defined 2/3
. survey plans to be filed with ..... 22(4)

Deposit
. application for homestead sale, with 85
. cover value of improvements, to 56

Destruction
. surface of land, of, prohibition ..... 50,53(1)(c)

PUBLIC LANDS ACT

Director

. acceptance and determination of homestead application ..... 84(2)
. appointment of 6
. defined 2/4
. delegation of powers by 7
. reservation of public land by ..... 18(d)

Disposition

. application for ..... 14(b),15
. assignment of, consent to 42
. cancellation—see **Cancellation**
. compliance with, determination ..... 43(1)
. condition of land in, no warranty as to 40
. construction of 37
. corrected ..... 25(3)
. defined ..... 2/5,118(b)
. execution of ..... 35(1),36
. existing, Act to apply to ..... 3(3)
. held by minor 41
. improvements on 56-58
. inconsistent, remedies 23
. land for 14
. proof of compliance with provisions in ..... 43(2)
. recovery of rent owing on 44,45
. regulations re 9,10
. reinstatement 27
. reservations in 34
. rights of holder on issue of 38
. sale of, in execution 62
. survey of 22

Dispute

. applications for dispositions, re ..... 15(2)

Distress

. recovery by 44

Districts

. grazing land ..... 108(1,2)

Dominion Lands Act

. referred to ..... 2/5(i),3(3)(b)

Entry

. land, upon
. . conditions 73
. . disposition for survey, under 22
. . removal of chattels, for ..... 58(8)
. . specified purposes, for, prior to issue of disposition 20
. premises and land, on
. . inspection re handling of crop 65
. . survey and examination, for 66

Equity share

. defined ..... 21.1(3)(b)

Error

. cancellation of disposition obtained in ..... 25(1)(b)
. cancellation of homestead sale granted in ..... 94(h)
. disposition, in, correction ..... 25(3)
. notification, in, issue of new one 32

PUBLIC LANDS ACT

Evidence

. compliance with covenants by holder ..... 43(2)
. support of application for title, in 101,102

Excavation

. public land on, prohibition ..... 51(1)(b)

Exchange

. land, of ..... 8(c)

Execution

. disposition, date of ..... 38(2)
. disposition, of, forfeiture of fees on failure ..... 39(2)
. sale of disposition in 62

Exemption

. lessee from rent 76
. taxation, homestead sale ..... 90,92(7)

Exploration

. occupation of land for 20

Extension of time

. incapacity or death of holder, on ..... 96(2-5),98
. personal representative, to ..... 115(2)
. purchaser to perform cultivation duties 89
. removal of chattels, for ..... 58(3)

Farm

. defined 2/6

Farming methods

. requirement by Minister re ..... 18(e)

Fees

. application for disposition, application of 39
. assignment, corporation ..... 117(2)
. notification, payment ..... 29(2)
. registration of assignments, on ..... 119(3)(e)
. tariff ..... 10(h)

Fences

. improvements, as ..... 56(2)

Forest reserves

. setting aside land for ..... 8(e,

Forests Act

. permit to cut timber under ..... 75(2)
. referred to ..... 118(b)(i)

Forfeiture

. chattels to Crown ..... 58(4,5)
. fees on failure to execute disposition ..... 39(2)
. payment on cancellation of lease ..... 78(2)

PUBLIC LANDS ACT

Forms
. Act, under 16
. disposition, regulations ..... 9(1)(g),(2)
. notice of seizure ..... 45,Form B
. notification for issue of certificate of title ..... 29, Form A

Fraud
. cancellation of disposition for ..... 25(1)(b)
. cancellation of homestead sale for ..... 94(h)
. title to homestead obtained by ..... 101(1)(h)

Game preserves
. setting aside land for ..... 8(e)

Geological exploration
. occupation of land for 20
. . regulations ..... 10(a)

Grain
. seizure of 45

Grantee
. Crown, right to lake or river bed or shore ..... 4(2)(b)

Grants
. defined 2/8
. inconsistent, remedies 23
. land, of ..... 8(d),19

Grazing lease
. cancellation—see **Cancellation**
. corporation, to 113,116,117
. deceased lessee, of 115
. granting of 106,110
. grazing association, to 109
. grazing capacity of land 108
. regulations re 112
. rent 107
. withdrawal of land from 113,114

Grazing methods
. requirement by Minister ..... 18(e)

Grazing reserve
. community 111

Historical sites
. setting aside land for ..... 8(e)

Holder
. copy of survey information to ..... 22(4)
. cultivation duties of 60
. defined 2/9
. exemption from tax recovery proceedings 63
. notice of intention to cancel disposition to ..... 26(2)
. proof of compliance with covenants ..... 43(2)
. request to withdraw from disposition by ..... 24,25(2)
. rights of, on issue of disposition 38

PUBLIC LANDS ACT

Homestead
. lease—see **Homestead lease**
. sale—see **Homestead sale**

Homestead lease
. sale of lands contained in ..... 18(c),30
. subject to former Act 123

Homestead Lease Loan Act
. assignment of homestead sale barred by loan under ..... 100(1)(f)
. cancellation of sale for breach of contract under ..... 94(f)
. levy by distress for loan under 44
. referred to ..... 56(5),91(3)(a),92(4)(a)
. repayment of loan under, before title ..... 101(1)(e)
. seizure of grain for loan under 45

Homestead sale
. agreement 82
. application for—see **Application**
. assignment 97,100
. cancellation—see **Cancellation**
. cultivation duties of purchaser 87
. . extension of time for 89
. permanent improvements, consent to 103
. prior 81
. purchase price 17,86,91,93
. residence requirements ..... 87(4),88
. sale to purchaser 99
. substitutional 91,92
. tax exemption ..... 90,92(7)
. use of 104

Homesteader see also **Lessee**
. sale of land to ..... 18(c)

Improvements
. application for disposition to show 56
. application of moneys collected for 57
. cancellation of homestead sale for non-payment, etc. ..... 94(c,e)
. compensation for, after cancellation 95
. disposal of, after termination of disposition 58
. forfeiture to Crown for trespass 46
. permanent, on homestead sale 103

Incorporation
. proof by grazing lessee 116

Industrial or commercial purposes
. withdrawal of land from lease for ..... 79(1)(b)

Inspection
. documents re handling of crop 65

Inspectors
. appointment of 6
. evaluation of improvements by 56

Instrument
. execution of ..... 35(1),36

PUBLIC LANDS ACT

Interest
. payable on deferred payments 10(f,g)
. purchase price, on 86(5,6)

Interference
. official, with, offence 53(2)

Investigation
. application for disposition 15

Irrigation
. withdrawal of land from lease for 79(1)(d)

Irrigation Act
. referred to 28(2)

Issue see also **Disposition**
. defined 2/10

Lake
. bed or shore, injury to, prohibition 51(1)(e)
. bed or shore, title to 4
. public access to 79(1)(e)

Land Titles Act
. referred to 2/2/17,21(2),30(2)(e)

Lands
. adjoining 2/1
. arable 80(a)
. carrying capacity of grazing 108
. condition of, no warranty as to 40
. defined 2/11
. disposition—see **Disposition**
. entry on—see **Entry**
. erroneous description in notification 32(1)
. exchange of 8(c)
. grants—see **Grants**
. public—see **Public lands**
. unauthorized use by lessee 74
. withdrawal—see **Withdrawal of land**

Lease
. cancellation—see **Cancellation**
. defined for Part 2 69(a)
. entry—see **Entry**
. grazing—see **Grazing lease**
. homestead—see **Homestead lease**
. Minister's discretion re 70
. withdrawal—see **Withdrawal of land**

Lessee see also **Homesteader**
. defined for Part 2 69(b)
. liability when two or more 72
. protection of interests of 73
. rent exemption to 76
. timber cutting by 75,105
. unauthorized use of lands 74

PUBLIC LANDS ACT

Lieutenant Governor in Council
. powers 8
. regulations by—see **Regulations**

Limitation
. exemption period of incapacitated homesteader 96(2-5)
. grant of land, on 19(2,3)

Litter
. prevention of 51(1)(a)

Livestock see also **Grazing lease**
. defined 2/12
. vacant public lands, on 59

Mental incapacity
. purchaser, of, effect 96,98
. . assignment, on 97,100

Mines and minerals
. Crown reservations re 34(1)

Mines and Minerals Act
. referred to 10(a)

Minister
. cancellation—see **Cancellation**
. consent to assignment 42,100
. correction of erroneous notification 32
. defined 2/13
. determination of compliance with disposition 43(1)
. grazing lease by—see **Grazing lease**
. order to remedy prohibited conditions 51(2,3)
. powers of
. . administrative 12-28
. . delegation 7
. . leases, re 69-79
. . registration of assignments 118-122
. sale of public lands by 18(a-c),21
. withholding of notification 33

Minors
. dispositions held by 41

Misrepresentation
. cancellation of disposition for 25(1)(b)
. cancellation of homestead for 94(a,h)

Mortgaging
. homestead sale, cancellation 94(d)

Municipality
. grant of land to 19

National park
. agreement with Canada re 8(i)

Natural areas
. setting aside of 13

PUBLIC LANDS ACT

Natural resources

. occupation of land for investigation of 20

Newspaper

. publication of notice of removal of improvements in ..... 58(7)(b)

Notice

. assignment of grazing lease 115
. cancellation of disposition ..... 25(1)(a),26(2)
. destruction or defacement ..... 53(1)
. livestock seizure, of ..... 59(3)
. refusal of consent to assignment 114
. remove chattels, to ..... 58(7-10)
. resumption of obligations re homestead ..... 96(4,5)
. seizure of grain ..... 45(2,6)
. . form ..... Form B
. vacate land, to, offence not to comply 52

Notification

. correction of 32
. defined 2/14
. grant to show purpose of ..... 20(4-6)
. issue of 29
. . completion of term of sale, before ..... 88(2)
. . form ..... Form A
. land in homestead sale, for 101,102
. name of deceased person, in 31
. reservations in 34
. withholding of 33

Noxious weeds

. rent exemption for ..... 76(a)
. seed to be free of 60

Oaths

. taking of 67

Obstruction

. official, of, offence ..... 53(2)

Occupant

. trespasser, as 46

Occupation

. public lands, of 20
. unlawful, an offence 52

Offences

. cancellation of disposition upon conviction for ..... 25(1)(c)
. dispositions, re, regulations ..... 9(1)(i),(2)
. failure to comply with notice to vacate 52
. general penalty for 55
. interference with bidder 54
. obstructing official ..... 53(2)
. removal of property of Crown ..... 53(1)
. unlawful occupation 52

PUBLIC LANDS ACT

Officers

. appointment of 6
. defined 2/15
. obstruction of, offence ..... 53(2)

Owner

. chattels, of, unknown ..... 58(8-10)

Payment

. clearing and breaking declared improvement, for ..... 56(5,6)
. refund—see **Refund**
. unauthorized use of land, for 48

Penalties

. general 55

Permit

. issue of ..... 35(2)
. timber cutting, to lessee 75,105

Personal representative

. application for notification by ..... 101(3)
. assignment of grazing lease to 115
. assignment of homestead sale by 97,100
. notice of resumption of obligations re homestead ..... 96(4,5)
. title vests in, upon notifications 31

Personation

. cancellation of disposition obtained by ..... 25(1)(b)
. cancellation of homestead sale obtained by ..... 94(h)

Posting

. notice of removal ..... 58(7)(a)
. notice of seizure ..... 45(2)(b)

Prescription

. land not to be acquired against Crown by 5

Price

. homestead sale, for 17,86,91,93
. . exemption of incapacitated or deceased persons 96,98
. . refund of ..... 95(b)
. sale, of public land ..... 18(a,b)
. transfer of sale, from land acquired by tax sale 64

Provincial Lands Act

. referred to ..... 2/5(i)/8,3(3)(b),64(3)

Provincial parks

. setting aside land for ..... 8(e)
. withdrawal of land for ..... 79(1)(c)

Provincial Parks Act

. referred to ..... 79(1)(c),118(b)(ii)

PUBLIC LANDS ACT

Public lands
. administration of ..... 3(2)
. defined 2/16
. disposition—see **Disposition**
. notification—see **Notification**
. purchase of additional ..... 83(2,3)
. sale—see **Sale**
. transfer of control ..... 8(f,g)
. unauthorized use of 46-51

Public Service Act
. appointments under 6

Purchaser see also **Homestead sale**
. cultivation duties 87
. . assignment, upon ..... 100(1)(a)
. . extension of time for 89
. defined ..... 80(b)
. disability, under 96,98
. eligibility as holder 62
. homestead sale
. . occupation and use 104
. . qualifications 83,91
. . residence requirements ..... 87(4),88
. . sale to 99
. seized livestock, passing of ownership ..... 59(6)

Qualifications
. age—see **Age qualification**
. applicant for homestead sale 83
. assignee of homestead sale 100

Recovery
. costs of remedying prohibited conditions ..... 51(2,3)
. payment for unauthorized use of land ..... 47(2)
. taxes levied on interest in public lands 63
. unpaid rent ..... 78(3)

Recreation area
. public access to ..... 79(1)(e)
. setting aside land for ..... 8(e)

Refund
. cancellation of homestead sale, upon 95
. deposit for improvements ..... 56(6),57(c)
. fees with application for disposition ..... 39(1)
. moneys paid on lease 70
. payments made on invalid transactions ..... 23(2)
. surplus from sale of grain ..... 45(7)

Refusal
. application for disposition 15
. consent to assignment by Minister ..... 122(2)

Register
. defined ..... 118(c)

PUBLIC LANDS ACT

Registrar
. defined 2/17
. notification to ..... 29(5)
. observance of restrictions in notification of grant ..... 19(6)

Registration
. assignment, of 118-122
. defined ..... 118(c)

Regulations
. dispositions, re ..... 9,10,25(1)(a)
. grazing leases, re 112
. reclamation, re 11

Reinstatement
. disposition, of 27

Removal
. chattels or improvements, of 58
. Crown property from land ..... 53(1)

Renewal
. existing, Act to apply to ..... 3(3)

Rent
. defined 2/18
. demand or acceptance not to affect Minister's rights 68
. exemption of lessee from 76
. grazing lease 107
. grazing livestock on vacant public lands ..... 59(3)(d)
. land acquired by tax sale, from, transfer 64
. recovery of ..... 44,45,78(3)
. reduction on withdrawal of land ..... 79(2)

Report
. seizure, of ..... 49(2)

Reservations
. Crown ..... 18(d),34

Residence
. grazing lessee, for ..... 110(1)
. homestead required, on ..... 83(1)(a),87(4),88
. . exemption of incapacitated or deceased persons 96,98
. . title to homestead, before ..... 101(1)(d)

River or stream
. bed or shore, injury to, prohibition ..... 51(1)(e)
. bed or shore, title to 6
. public access to ..... 79(1)(e)

Road allowance
. improvements near 103

Rule against perpetuities
. infringement ..... 21(2)

PUBLIC LANDS ACT

Sale
. assistance in effecting 30
. forfeited improvements ..... 58(5-7)
. homestead—see **Homestead sale**
. interference with bidder at public .. 54
. livestock seized, of 59
. public lands, of ..... 8(a,b)
. . non-Canadian, to, prohibition 21.1
. . powers of Minister ..... 18(a-c),21
. . taxes in arrears, when 27
. seized grain ..... 45(4-7)

Sand and gravel see **Clay, marl, sand or gravel**

School
. grant of land to rural 19

Scientific purposes
. occupation of land for 20

Seizure
. clay, marl, sand or gravel 49
. crops unlawfully planted 48
. grain, of 45
. livestock, of 59

Seizures Act
. referred to ..... 44(2)

Service of notice
. seizure, of ..... 45(2,6)

Shares see also **Crop share**
. ownership, proof by grazing lessee ..... 116(1)(b)

Shelter belts
. maintenance by holder 61

Soil erosion
. prevention of ..... 51(1)(f)

Stream see **River or stream**

Sub-agent
. defined 2/19

Surface
. prohibition to destroy 50
. reclamation regulations 11

Surface Reclamation Act
. referred to ..... 11(1,4)

Surplus
. sale of seized livestock, from, application ..... 59(9)

PUBLIC LANDS ACT

Survey
. land in disposition, of 22
. right of entry for 66

Surveys Act
. referred to 2/20

Tariff
. fees, of ..... 10(h)

Tax
. arrears
. . application of moneys collected for improvements on ..... 57(b)
. . application of purchase moneys on 28
. . cancellation of homestead sale for ..... 94(b)
. exemption, homestead sale ..... 90,92(7)
. land acquired by tax sale, from, transfer 64
. recovery re interest in public lands 63

Term
. grazing lease ..... 106(1),110(2)

Timber
. cutting and use by lessee 75,105

Time
. applying for reinstatement of disposition, for 27
. claiming remedy re defective grant, for ..... 23(3)
. extension—see **Extension of time**
. objections against cancellation of disposition ..... 26(2,3)
. removal of chattels or improvements, for ..... 58(2-4)

Title
. crops, to 77
. improvements, to, after confiscation ..... 58(11)
. lake or river bed or shore, to 4
. notification of—see **Notification**

Township
. defined 2/20

Transfer
. administration of public lands ..... 8(f,g)
. lands in disposition, consent to 42
. moneys received for land acquired by tax sale 64

PUBLIC LANDS ACT

Transfer agreement
. defined 2/21
. orders for carrying out ..... 8(j)(ii)

Trees see also **Timber**
. planting by holder 61

Trespassing
. land, on 46
. . exemption to officer for ..... 45(8)

Veteran
. defined 2/22
. eligibility for homestead sale ..... 83(1)(a)
. settlement and rehabilitation ..... 8(h)

Veterans' Land Act (Canada)
. assignment of homestead sale barred by indebtedness under ..... 100(1)(e)
. referred to ..... 2/22,94(e),101(1)(f)

PUBLIC LANDS ACT

Waste material
. accumulation, prohibition ..... 51(1)(a)

Water
. rate charges, arrears 28

Watersheds
. protection of ..... 51(1)(d)

Wilderness areas
. setting aside public lands as ..... 8(e)

Withdrawal of land
. disposal under Act, from ..... 14(a)
. . request of holder, on ..... 24,25(2)
. grazing lease, from 113,114
. lease, from 79
. . protection of lessee 73

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GOVERNMENT OF THE PROVINCE OF ALBERTA

THE SOCIETIES ACT

being chapter 347 of the Revised Statutes of Alberta 1970
with amendments to and including 1971

OFFICE CONSOLIDATION

DEPARTMENT OF THE ATTORNEY GENERAL

NOTE

All persons making use of this consolidation are reminded that it has no legislative sanction; that the amendments have been embodied only for convenience of reference, and that the original Acts should be consulted for all purposes of interpreting and applying the law.

THE SOCIETIES ACT

CHAPTER 347

Short title

1. This Act may be cited as *The Societies Act.*
[R.S.A. 1970, c. 347, s. 1]

Definitions

2. In this Act,

(*a*) "director" includes a trustee, officer, member of an executive committee and any person occupying such a position, whatever name the position is called;

(*b*) "extraordinary resolution" means a resolution passed by a majority of not less than three-fourths of such members entitled to vote as are present in person or, where proxies are allowed, by proxy at a general meeting of which notice specifying the intention to propose the resolution as an extraordinary resolution has been duly given;

(*c*) "Registrar" means

(i) the Registrar of Companies, or

(ii) a duly authorized person performing the duties of the Registrar of Companies;

(*d*) "society" means a society incorporated under this Act. [R.S.A. 1970, c. 347, s. 2]

Application to existing societies

3. (1) Any benevolent society incorporated under *The Benevolent Societies Act,* being chapter 159 of the Revised Statutes of Alberta, 1922, or under an Ordinance of the North-West Territories entitled *An Ordinance respecting Benevolent and Other Societies,* and also any corporation incorporated under the provisions of *The Mechanics' and Literary Institutes Act,* being chapter 16 of the Statutes of Alberta, 1908, and chapter 163 of the Revised Statutes of Alberta, 1922, shall be deemed to be a society incorporated under this Act.

(2) The by-laws or the statutory provisions in the nature of by-laws by which a society referred to in subsection (1) is governed shall, so far as the same are not contrary to an expressed provision of this Act, continue in force until altered or rescinded. [R.S.A. 1970, c. 347, s. 3]

Incorporation

Incorporation

4. Five or more persons may become incorporated under this Act for any benevolent, philanthropic, charitable, pro-

vident, scientific, artistic, literary, social, educational, agricultural, sporting or other useful purpose, but not for the purpose of carrying on a trade or business.
[R.S.A. 1970, c. 347, s. 4]

Incorporation of persons for special purpose

5. Where an Act other than *The Companies Act* provides for the incorporation of persons for a special purpose, no society shall be incorporated for that purpose under the provisions of this Act. [R.S.A. 1970, c. 347, s. 5]

Shares, etc.

6. (1) No society shall have a capital divided into shares or declare any dividend or distribute its property among its members during the existence of the society.

(2) The interest of a member in a society is not transferable.

(3) This section does not apply to a benevolent society incorporated before April 12, 1924,

(*a*) under *The Benevolent Societies Act*, or

(*b*) under *An Ordinance respecting Benevolent and Other Societies*. [R.S.A. 1970, c. 347, s. 6]

Application for incorporation

7. (1) Persons desiring to become incorporated under this Act shall make and subscribe an application according to the Form in Schedule A, and also by-laws agreed upon by them for the government of the society, and shall transmit in duplicate the applications and by-laws together with a registration fee of five dollars, to the Registrar.

(2) The application shall set forth

(*a*) the intended corporate name of the society, and

(*b*) the purpose or purposes for which incorporation is desired.

(3) The by-laws that accompany the application shall contain provisions for all the matters set out in Schedule B.
[R.S.A. 1970, c. 347, s. 7]

Discretion of Registrar

8. (1) Subject to the right of appeal given under subsection (3) the Registrar shall be the sole judge as to whether the purposes mentioned in the application referred to in section 7, or any of them, are purposes for which the society may be incorporated under the provisions of this Act.

(2) The Registrar may direct that any of the purposes mentioned in the application referred to in section 7, or any of the by-laws accompanying the application, be struck out or be modified in accordance with the directions given by him.

(3) An appeal may be taken to the Lieutenant Governor in Council from a decision given by the Registrar under the provisions of this section within one month of the date of the decision. [R.S.A. 1970, c. 347, s. 8]

Refusal of incorporation

9. The Registrar may refuse incorporation for any reason that may appear to him to be sufficient.
[R.S.A. 1970, c. 347, s. 9]

Incorporation certificate

10. The Registrar, upon receipt of the application and by-laws and in compliance with the directions, if any, given by him with respect thereto,

(*a*) may issue under his seal of office a certificate that the society is incorporated, and

(*b*) shall, at the expense of the applicants, publish a notice of the incorporation in *The Alberta Gazette*.
[R.S.A. 1970, c. 347, s. 10]

Certificate as evidence of regularity

11. A certificate of incorporation issued by the Registrar in respect of a society is conclusive proof

(*a*) that the requirements of this Act in respect of incorporation have been complied with, and

(*b*) that the society is duly incorporated in accordance with the provisions of this Act.
[R.S.A. 1970, c. 347, s. 11]

Effect of certificates

12. From the date of the certificate of incorporation, the subscribers to the application and such other persons as may from time to time become members of the society are a body corporate and have all the powers, rights and immunities vested by law in a body corporate.
[R.S.A. 1970, c. 347, s. 12]

Rescission, etc., of by-laws

13. The by-laws of a society shall not be rescinded, altered or added to except by extraordinary resolution of the society. [R.S.A. 1970, c. 347, s. 13]

Registrar may refuse to register

14. If the Registrar is of the opinion that a by-law is not in accordance with the application referred to in section 7, or that it contains anything contrary to law, he shall refuse to register it. [R.S.A. 1970, c. 347, s. 14]

Alterations to be registered

15. No rescission or alteration of, or addition to a by-law has effect until it has been registered by the Registrar.
[R.S.A. 1970, c. 347, s. 15]

Alteration of objects

16. (1) A society may, by extraordinary resolution, alter its objects

(*a*) to include some object or objects that may conveniently or advantageously be combined with the existing objects of the society, or

(*b*) to restrict or abandon an object specified in its application,

but no such resolution shall take effect until the Registrar has approved and registered it.

(2) A notice of any such alteration shall be published, at the expense of the society, in *The Alberta Gazette.*
[R.S.A. 1970, c. 347, s. 16]

Powers of society

17. (1) A society may acquire and take by purchase, donation, devise or otherwise all kinds of real estate and personal property, and may sell, exchange, mortgage, lease, let, improve and develop the same, and may erect and maintain any necessary buildings.

(2) The funds and property of the society shall be used and dealt with for its legitimate objects only and in accordance with its by-laws. [R.S.A. 1970, c. 347, s. 17]

Borrowing powers

18. (1) For the purpose of carrying out its objects, a society may borrow or raise or secure the payment of money in such manner as it thinks fit, and in particular by the issue of debentures.

(2) The power of a society under subsection (1) shall be exercised only under the authority of the by-laws of the society and in no case shall debentures be issued without the sanction of an extraordinary resolution of the society. [R.S.A. 1970, c. 347, s. 18]

Negotiable instruments

19. For the purpose of carrying out its objects, a society may, subject to its by-laws, draw, make, accept, endorse, discount, execute and issue promissory notes, bills of exchange, and other negotiable or transferable instruments.
[R.S.A. 1970, c. 347, s. 19]

Members

Minors

20. A person under the age of 18 years who is elected or admitted as a member of a society, or appointed to an office therein, is liable to the payment of fees and otherwise liable under the rules of the society as if he were of full age.
[R.S.A. 1970, c. 347, s. 20; 1971, c. 1, s. 21 *Eff. July 1/71*]

Limitation of liability of members

21. No member of a society is, in his individual capacity, liable for a debt or liability of the society.
[R.S.A. 1970, c. 347, s. 21]

Arbitration

22. (1) The by-laws of a society may provide that a dispute arising out of the affairs of the society and between any members of the society or between

(*a*) a member or a person who is aggrieved and who has for not more than six months ceased to be a member, or

(*b*) a person claiming through the member or aggrieved person or claiming under the by-laws of the society,

and the society or a director or officer of the society, shall be decided by arbitration, which shall be under *The Arbitration Act* unless the by-laws prescribe some other method.

(2) A decision made pursuant to such arbitration is binding on all parties and may be enforced on application to a district court, and unless the by-laws otherwise provide there is no appeal therefrom.

[R.S.A. 1970, c. 347, s. 22]

Fines

23. (1) A society may by its by-laws impose a fine of not more than five dollars on a member contravening a by-law of the society.

(2) A fine may be recovered as a debt due from the member to the society, and all fines so recovered shall belong to the society. [R.S.A. 1970, c. 347, s. 23]

Returns

Address

24. A society shall have an address in the Province to which communications and notices may be sent, and at which all process may be served, and shall file with the Registrar notice of each change in address.

[R.S.A. 1970, c. 347, s. 24]

Annual general meeting, etc.

25. A society shall hold in the Province an annual general meeting, and shall within fourteen days after each annual meeting file with the Registrar a statement in the form of a balance sheet, which shall be audited and signed by the society's auditor or by two directors if there is no auditor and shall contain general particulars of the assets, liabilities, revenue and expenditures of the society.

[R.S.A. 1970, c. 347, s. 25]

List of directors

26. A society

(*a*) shall file with the annual statement referred to in section 25 a list of its officers and directors, with their addresses and occupations, and

(*b*) shall, upon request of the Registrar at any time, furnish him with particulars of its officers and directors. [R.S.A. 1970, c. 347, s. 26]

Filing and registering of extraordinary resolution

27. (1) A society shall file with the Registrar in duplicate every extraordinary resolution passed for any purpose mentioned in this Act.

(2) The Registrar shall register one copy of the extraordinary resolution and return the other copy certified as having been filed. [R.S.A. 1970, c. 347, s. 27]

Authentication of returns, etc.

28. Every notice, return or resolution required to be filed with the Registrar shall be authenticated by a director, secretary or other authorized officer of the society.

[R.S.A. 1970, c. 347, s. 28]

Furnishing copy of by-laws

29. A society shall furnish to a member, at his request and on payment of a sum not exceeding fifty cents, a copy of its application and by-laws. [R.S.A. 1970, c. 347, s. 29]

Branch Societies

Branch societies

30. (1) A society may establish and maintain one or more branch societies.

(2) A branch society shall have such powers, not exceeding the powers of the society, as the society may from time to time confer.

(3) When a society establishes a branch society, it shall send immediately to the Registrar a notice setting forth

(*a*) the date on which the branch society was authorized,

(*b*) the title, locality and powers of the society, and

(*c*) such other information as the Registrar may require,

and the society shall likewise notify the Registrar when a branch ceases to exist. [R.S.A. 1970, c. 347, s. 30]

Dissolution

Dissolution

31. (1) For the purposes of this section, the word "society" includes a society or club that is incorporated by a private Act of the Province and that has for its object the provision of facilities for the social intercourse and recreation of its members.

(2) Upon sufficient cause being shown to the Registrar, he may issue to the Lieutenant Governor in Council a certificate under his seal of office declaring that he is satisfied that the incorporation of a society should be revoked and cancelled.

(3) Upon receipt of such a certificate, the Lieutenant Governor in Council may

(*a*) revoke and cancel the incorporation of the society, and

(*b*) declare the society to be dissolved upon such conditions and subject to such provisions as may be deemed proper.

(4) A person who, by himself or in association with others, carries on or attempts to carry on the affairs of a society the incorporation of which has been revoked and cancelled and that has been declared to be dissolved is guilty of an offence and liable on summary conviction to a fine not exceeding five hundred dollars.

(5) Upon the revocation of the incorporation of a society, or upon the disorganization thereof, the Lieutenant Governor in Council may appoint a liquidator or liquidators to wind up the affairs of the society.

(6) The liquidator or liquidators appointed under subsection (5) may exercise all the powers conferred by in-

corporation on the society or on the directors or on any other official of the society, for the purpose of selling or otherwise disposing of the assets of the society and distributing the proceeds amongst the persons by law entitled thereto. [R.S.A. 1970, c. 347, s. 31]

Surrender of certificate of incorporation

32. (1) A society may, by extraordinary resolution, surrender its certificate of incorporation.

(2) If satisfied that sufficient notice of the society's intention to surrender its certificate of incorporation has been given and that no debts or liabilities of the society are outstanding, the Registrar may accept the surrender of the certificate and cancel it, and fix a date from which the society shall be dissolved. [R.S.A. 1970, c. 347, s. 32]

Application of *The Companies Act*

33. The provisions of *The Companies Act* relating to the removal from the register of companies defunct or in default apply, *mutatis mutandis*, to a society that has failed for a period of two years to send or file a return, notice or document required to be made or filed or sent to the Registrar pursuant to this Act, or the regulations made hereunder, or where the Registrar has reasonable cause to believe that a society is not in operation. [R.S.A. 1970, c. 347, s. 33]

Restoration of society

34. The provisions of *The Companies Act* relating to the restoration to the register of a company apply, *mutatis mutandis*, to the restoration of a society under this Act. [R.S.A. 1970, c. 347, s. 34]

Winding-up of companies

35. The provisions of *The Companies Act* relating to the winding-up of companies apply *mutatis mutandis*, to a society under this Act. [R.S.A. 1970, c. 347, s. 35]

General

General penalty

36. A society that contravenes any of the provisions of this Act, or any of the regulations made hereunder, is guilty of an offence and liable on summary conviction to a fine not exceeding one hundred dollars. [R.S.A. 1970, c. 347, s. 36]

Change of name

37. A society may change its name, and may contract in the same way as if it were registered under the provisions of *The Companies Act*. [R.S.A. 1970, c. 347, s. 37]

Rules and regulations

38. The Lieutenant Governor in Council may from time to time

(*a*) make regulations for carrying out the purposes of this Act,

(*b*) set the fees payable to the Registrar for services under the provisions of this Act,

(*c*) alter or add to the forms in the schedules, and

(*d*) prescribe the returns to be made by societies and the form of the returns. [R.S.A. 1970, c. 347, s. 38]

SCHEDULE A

THE SOCIETIES ACT
(Section 7)

Application

We, the undersigned, hereby declare that we desire to form a society under *The Societies Act*, and that

(1) The name of the society is.....

(2) The object of the society is.....
.....

(3) The operations of the society are to be chiefly carried on in .....

Dated this.....day of....., 19.....
.....
.....
.....

(*Full names, addresses and occupations of applicants*)

Witness: .....
.....

(*Full name, address and occupation*)

[R.S.A. 1970, c. 347, Schedule A]

SCHEDULE B

THE SOCIETIES ACT
(Section 7)

(1) Terms of admission of members and their rights and obligations.

(2) Conditions of withdrawal of members and manner, if any, in which a member may be expelled.

(3) Mode and time of calling general and special meetings of the society and number constituting a quorum at any such meeting and rights of voting.

(4) Appointment and removal of directors and other officers and their duties, powers and remuneration.

(5) Exercise of borrowing powers.

(6) Audit of accounts.

(7) Custody and use of the seal of the society.

(8) Manner of making, altering and rescinding by-laws.

(9) Preparation and custody of minutes of proceedings of meetings of the society and of the directors, and other books and records of the society.

(10) Time and place, if any, at which the books and records of the society may be inspected by members.

[R.S.A. 1970, c. 347, Schedule B]

INDEX

SOCIETIES ACT

CHAPTER 347

Act

. penalties for violation of 36
. regulations for carrying out of 38(a)

Address

. society's official 24

Alteration

. by-laws—*see* **By-laws**
. objects, of 16

Amendment see **By-laws**

Appeal

. Registrar re disapproval of purpose . . . . . 8(3)

Application

. incorporation 7
. . copies to members 29
. . form . . . . . Schedule A

Arbitration

. settlement of disputes by . . . 22

Arbitration Act

. referred to . . . . . 22(1)

Balance sheet

. filing of annual 25

Benevolent Societies Act

. capital of societies under . . . . . 6(1, 3)
. societies under, deemed incorporated under Act . . . 3(1)

Borrowing

. powers of society 18

Branch societies

. establishment and registration 30

By-laws

. arbitration, re 22
. copies to members . . . 29
. existing societies, of, force 3(2)
. fines on members, re 23
. rescission and amendment of 13
. . refusal to register . . 14
. . requirement of registration 15
. society 7(1, 3)
. . contents Schedule B

SOCIETIES ACT—Con.

Sec.

Cancellation

. incorporation, of 31(3)

Certificate

. dissolution . . 31(2)
. incorporation 10
. . effect 12
. . proof, as 11

Commencement

. society, of . . . 12

Companies Act

. application of . . . 33, 34, 35, 37

Debentures

. powers to issue 18

Definitions . . . 2

Directors

. defined . . . . . 2(a)
. list of, filing 26

Disputes

. settlement by arbitration . . . 22

Dissolution

. society, of . 31
. . voluntary 32

District court

. enforcement of arbitration decisions in 22(2)

Enforcement

arbitration decisions 22(2)

Evidence

. certificate of incorporation as 11

Fees

. copies to members, for 29
. Registrar's regulations 38(b)

Fines

. members, on, by-laws 23

Forms

. alteration of, regulations 38(c)
application for incorporation Schedule A

SOCIETIES ACT—Con. Sec.

Incorporation

application—*see* **Application**
cancellation of ..... 31(3)
certificate—*see* **Certificate**
proof of 11
refusal by Registrar 9
society, of 4
surrender of 32

Interest

member's, not transferable ..... 6(2)

Lieutenant Governor in Council

cancellation of incorporation by ..... 31(3)
regulations—*see* **Regulations**

Liquidators

appointment and powers ..... 31(5,6)

Mechanics' and Literary Institutes Act

societies under, deemed incorporated under Act ..... 3(1)

Meeting

annual 25

Members

copies of application and by-laws to 29
fines on, by-law 23
minors as 20
not liable for society 21

Minors

members, as 20

Name

application to show ..... 7(2)(a)
change of 37

Negotiable instruments

powers to deal with 19

Non-profit organizations

societies as 4,6

Notice

alteration of objects ..... 16(2)
change of address 24
incorporation, of ..... 10(b)

SOCIETIES ACT—Con. Sec.

Objects

alteration of 16
application to show ..... 7(2)(b)
Registrar's discretion re approval of 8
various, of societies 4

Officers

list of, filing 26

Ordinance respecting benevolent and other societies

capital of societies under ..... 6(3)
societies under, deemed incorporated under Act ..... 3(1)

Penalties

carrying on society on dissolution ..... 31(4)
contravention of Act 36

Private Act Societies

dissolution of ..... 31(1)

Property

rights of society 17

Publication

alteration of objects ..... 16(2)
incorporation, of ..... 10(b)
voluntary dissolution ..... 32(2)

Purposes see **Objects**

Register

restoration to 34

Registrar

defined ..... 2(c)
discretion re approval of purposes 8
dissolution of society on surrender ..... 32(2)
refusal of incorporation 9

Registration

alteration of by-laws, of 15
branch societies, of ..... 30(3)
extraordinary resolution, of 27

Regulations

Lieutenant Governor in Council, by 38
penalties for violation of 36

Rescission see **By-laws**

SOCIETIES ACT—Con. Sec.

Resolution

. extraordinary ..... 2(b)
. . alteration of objects, re ..16
. . filing of 27
. . rescission and amendment of by-laws by 13
. . surrender of incorporation, re 32(1)

Returns

. annual, by society 25
. . list of directors with 26
. authentication of 28
. regulations re .....38(d)

Share capital

. societies not to have ..... 6(1)

SOCIETIES ACT—Con. Sec.

Societies

. continuation of existing . 3
. defined ....2(d)
. restoration to register 34
. special Act 5

Striking-off register

. society, of . .33

Surrender

. incorporation, of 32

Transfer

. member's interest not subject to 6(2)

Verification

. returns to Registrar 28

Winding-up

. dissolved society, of . 31(5,6)
. provisions governing 35

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THE PETTY TRESPASS ACT

CHAPTER 273

Short title

1. This Act may be cited as *The Petty Trespass Act.*
[1962, c. 60, s. 1]

Trespass on land

2. (1) No person shall trespass upon

(*a*) privately owned land, or

(*b*) Crown land subject to any disposition granted under *The Public Lands Act*, except a grazing lease or a grazing permit, or

(*c*) a garden or lawn,

with respect to which he has had notice by word of mouth, or in writing, or by posters or signboards, not to trespass.

(2) For the purposes of subsection (1) a person shall be deemed to have had notice not to trespass when posters or signboards are visibly displayed

(*a*) at all places where normal access is obtained to the land, and

(*b*) at all fence corners or where there is no fence, at each corner of the land. [1962, c. 60, s. 2]

Offences and penalties

3. A person who contravenes section 2 and whether or not any damage is occasioned thereby, is guilty of an offence and liable on summary conviction to a fine of not more than $100. [1962, c. 60, s. 3]

Liability of driver

4. Where a trespass to which this Act applies is committed by means of a motor vehicle, the driver of the vehicle is guilty of the contravention of this Act and liable to the fine. [1962, c. 60, s. 4]

Apprehension without warrant

5. Any person found committing a trespass to which this Act applies may be apprehended without warrant by any peace officer, or by the owner or occupier of the land on which the trespass is committed, or the servant of, or any person authorized by the owner or occupier of the land, and may be forthwith taken before the nearest magistrate or justice of the peace to be dealt with according to law.
[1962, c. 60, s. 5]

Laying of information

6. No person shall be prosecuted under this Act except upon an information laid by the owner or occupier of land, or his servant. [1962, c. 60, s. 6]

Jurisdiction of magistrate

7. Nothing in this Act authorizes any magistrate or justice of the peace to hear and determine a case of trespass in which the title to land, or to any interest therein, is called in question or affected, but every such case shall be dealt with according to law in the same manner as if this Act had not been passed. [1962, c. 60, s. 7]

Exception

8. Nothing in this Act extends to a case where the person trespassing acted under a fair and reasonable supposition that he had a right to do the act complained of, or to a case within section 373 of the *Criminal Code*. [1962, c. 60, s. 8]

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THE FOREST RESERVES ACT

CHAPTER 146

Short title

1. This Act may be cited as *The Forest Reserves Act.*
[1964, c. 29, s. 1]

Definitions

2. In this Act,

(*a*) "forest reserve" means an area comprising lands for the time being set aside as a forest reserve pursuant to this Act;

(*b*) "Minister" means the Minister of Lands and Forests. [1964, c. 29, s. 2]

Application of Act

3. This Act and the regulations apply to all lands within the boundaries of any forest reserves established pursuant to this Act. [1964, c. 29, s. 3]

Forest officers

4. The Minister may appoint such forest officers as are necessary to carry out this Act. [1964, c. 29, s. 4]

Purpose of reserves

5. All forest reserves within the Province are set apart and established for the conservation of the forests and other vegetation therein and for the maintenance of conditions favourable to an optimum water supply.
[1964, c. 29, s. 5]

Constitution of reserves

6. The lands described in the appendix to the agreement set forth in the Schedule to chapter 20 of the Statutes of Alberta, 1948, and to chapter 59 of the Statutes of Canada, 1947, and any other lands added thereto by amendments are hereby constituted as forest reserves within the Province.
[1964, c. 29, s. 6]

Acquisition of land

7. The Lieutenant Governor in Council may authorize the Minister

(*a*) to purchase, expropriate, or otherwise acquire lands within a forest reserve or adjoining a forest reserve,

(*b*) to exchange for land within or adjoining a forest reserve, any available public lands situated outside the boundaries of the forest reserve, and to pay compensation upon an exchange of land, and

(*c*) to prohibit or restrict the conduct of any business or commercial activity on any land situated within the boundaries of a forest reserve.
[1964, c. 29, s. 7]

Regulations

8. The Lieutenant Governor in Council may make regulations

(*a*) governing the pasturage of cattle in forest reserves,

(*b*) prescribing by signs posted along any forestry road or any part thereof

(i) the speed limit to be observed on it by all vehicles or by any class of vehicles, and

(ii) directions or orders controlling or prohibiting the movement of any vehicular, pedestrian or other traffic,

(*c*) regulating or prohibiting any kind of behaviour or traffic in forest reserves,

(*d*) respecting the issuance of annual permits for the grazing of stock in forest reserves, and

(*e*) prohibiting or restricting the use of firearms and air guns in forest reserves. [1964, c. 29, s. 8]

Cancellation of permit

9. The Minister may at any time cancel a permit or other authorization issued pursuant to this Act.
[1964, c. 29, s. 9]

Posting of signs

10. No signs shall be posted in a forest reserve except those prescribed by the regulations or authorized by the Minister. [1964, c. 29, s. 10]

Offences and penalties

11. A person who

(*a*) contravenes this Act or the regulations or a term or condition of a permit or other authorization issued pursuant to this Act, or

(*b*) wilfully defaces, knocks down, removes or otherwise renders illegible or injures any sign, signal or obstruction erected or placed in a forest reserve for the direction or safety of traffic or for any other purpose,

is guilty of an offence and liable on summary conviction to a fine of not more than $500 and in default of payment to imprisonment for a term not exceeding six months.
[1964, c. 29, s. 11]

Application of other Acts

12. (1) Except as otherwise provided in the regulations, *The Forests Act* and *The Public Lands Act* apply to all public lands within a forest reserve.

(2) Subject to the regulations,

(*a*) dispositions of public lands in forest reserves other than those relating to timber rights shall be made pursuant to *The Public Lands Act*, and

(*b*) dispositions of timber rights on public lands in forest reserves shall be made pursuant to *The Forests Act*.

[1964, c. 29, s. 12]

FOREST RESERVES ACT
(R.S.A. 1970, c. 146)

ction 12(1) and (2)(b)

Add the figures ", 1971" after the words "The Forests Act".

971, c. 37, s. 53(2)]

[Effective July 1, 1971]

B30096